"When we are no longer able to change a situation, we are challenged to change ourselves". ~Victor Frankl

University of Alberta

Stages of Change and the Working Alliance in Psychotherapy

by

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Dedication

This thesis is dedicated to my family, Cheryl, Dennis, and Chris Emmerling, who have given me so much support and inspired me to pursue my dreams. I also dedicate this thesis to Ryan Smith, for his consistent encouragement and unwavering support. I feel very blessed to be where I am today and to have had the opportunity to journey down this very rewarding path. With the continued support of these individuals, I have been able to grow and develop both personally and professionally.

Abstract

This study investigated the existence of relationships between the stages of change, working alliance, psychological distress, and symptom improvement throughout psychotherapy. Additionally, the working alliance was investigated as a mediating variable between the stages of change and symptom improvement. Sixty two adult clients attending counselling at a community mental health clinic completed the University of Rhode Island Change Assessment scale (URICA), the Working Alliance Inventory (WAI-S), and the General Health Questionnaire (GHQ-28) after the first, fifth and second last sessions. Clients who moved from the contemplation to the action stage during psychotherapy reported stronger working alliances, less psychological distress, and more symptom improvement than clients who remained in the contemplation stage. Additionally, the working alliance was found to increase throughout psychotherapy and to partially mediate the relationship between the stages and amount of symptom improvement. Further support was found for the importance of establishing and maintaining a strong working alliance.

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CHAPTER I

Introduction

Mental health continues to be a serious public health concern (World Health Organization [WHO], 2001; 2007). Despite increases in physical health in the last 50 years, mental health has declined (WHO, 2001). Worldwide depression has become one of the leading causes of disability, as it was the fourth leading contributor to the global burden of disease in 2000 and is projected to take the second place ranking for all ages and both sexes by 2020 (WHO, 2007). In Canada alone, as many as one in five individuals will develop mental health problems each year (Health Canada, 2002a).

This decline in mental health may be due to the failure of countries worldwide to recognize the burden of poor mental health on the individual and community (WHO, 2001). The negative impacts of poor mental health reach beyond the individuals involved, creating both emotional and financial burdens for families and society as a whole (WHO, 2003; 2007). It has been estimated by the WHO (2003) that the average cost of mental health problems in developed countries is 3 to 4% of their gross national product (GNP); however, this figure may be low as mental health concerns cost national economies several billion dollars in both expenditures incurred and loss of productivity. For instance, a recent review of the economic burden of illness in Canada found that the direct treatment costs of mental illness totaled six billion dollars while the multiple indirect costs, such as lost productivity and early death, cost just over eight billion dollars (Health Canada, 2002b).

Adding to this mental health concern is the unfortunate fact that most people can only access mental health services through insurance companies or other service

providers, which have drastically reduced the number of psychotherapy sessions afforded to clients (Arnett, Nicholson, & Breault, 2004). This reduction in mental health services has occurred despite decades of research providing strong empirical evidence that psychotherapy is effective in treating a wide range of mental health problems with moderate effect sizes in the .40 to .60 range (Lambert & Ogles, 2004; Nathan & Gorman, 2002). As psychotherapy has proven to be effective in treating mental health concerns, one way to address rising mental health problems is for researchers and practitioners to further refine their understanding of psychotherapy treatment models. Gaining a better understanding of the psychotherapy process and outcome variables that compose these treatment models will assist in providing more efficient services, while increasing the overall quality of mental health treatment.

Due to the need to reduce the duration of mental health treatment, many practitioners have been searching for treatment methods that will assist them in providing efficient and high quality services. In recent years psychotherapy researchers have also been investigating ways to improve psychotherapy treatment models by focusing on understanding client change, developing effective therapeutic relationships, and predicting successful outcomes. Although these studies have greatly contributed to psychotherapy research on process and outcome variables, there still remain many unanswered questions on how it is that people change (Prochaska, 2000). Understanding the change process is critical to enhancing therapeutic services as it assists practitioners in determining the main influences that promote change and can lead to an increase in successful outcomes (DiClemente, Schlundt, & Gemmell, 2004). Consequently, one way to meet the need for therapeutic effectiveness during brief

therapy is for psychotherapy practitioners to develop a more comprehensive understanding of the human change process.

The stages of change are one variable that is showing considerable promise in understanding the change process in both addiction and mental health treatment. Studies have shown that being in a higher stage of change leads to stronger working alliances (Principe, 2005; Taft, Murphy, Musser, & Remington, 2004) and better progress in psychotherapy (Principe, Marci, Glick, & Ablon, 2006; Prochaska, Norcross, & DiClemente, 1994). Based on these findings, it appears that one of the keys to increasing therapeutic effectiveness is to understand the stages of change and their impact on psychotherapy process and outcome variables. An approach that may assist in understanding the stages of change is the transtheoretical model (TTM) of change, as it is a theoretical and empirically validated model for investigating process and outcome variables in the change process (Prochaska & DiClemente, 1982).

TTM has become recognized as one of the most influential models describing behavior change (Derisley & Reynolds, 2000; Prochaska & DiClemente, 1983; Prochaska, DiClemente, Velicer, & Rossi, 1992). Unfortunately, it has been investigated mainly in addiction populations. Additional studies are needed to test the applicability of the TTM to other psychotherapy contexts as the previous findings may not apply to counselling populations presenting with a broader range of concerns.

Although few studies have investigated the use of the TTM in psychotherapy, it was originally developed as an integrative psychotherapy model of general change. This suggests that with its empirical base and benefits for clients' readiness to change, TTM has a great potential for counselling (Petrocelli, 2002). For example, one way the TTM

may be useful in a psychotherapy context is by assisting counsellors to better understand clients that appear resistant to the change process. Studies have shown that even though these clients appear resistant, a more plausible reason they may not be ready to change is their ambivalence towards the change process (Engle & Arkowitz, 2006). As the notion of theoretical readiness has been well established in the TTM, it could assist mental health practitioners by identifying clients' stage of change (Prochaska, DiClemente, & Norcross, 1992). This would enable clinicians to adjust their interventions to match their clients' current stage of change. Using therapeutic techniques that are more congruent with their clients' current stage could assist in strengthening the working alliance before introducing additional therapeutic interventions. This may be especially effective with those clients who are more ambivalent to the change process (Prochaska & Norcross, 2004).

To better understand the change process, it is also essential to investigate the working alliance as it has been found to consistently predict client outcomes (Horvath & Luborsky, 1993; Horvath & Symonds, 1991; Lambert & Ogles, 2004; Martin, Garske, & Davis, 2000; Safran & Muran, 2000) and is impacted by clients' stage of change (Principe, 2005; Taft et al., 2004). Recent research has also found the working alliance to be a mediating variable between client variables and therapeutic outcome (Joyce, Ogrodniczuk, Piper, & McCallum, 2003).

When investigating the change process, Henry and Strupp (1994) have emphasized the importance of exploring the stages of change and the working alliance as they found the "willingness and ability to become actively involved in the treatment process seems to be a crucial factor in the alliance" (p. 57). To support their claim,

additional research has noted that when clients are ready to begin working on changing their problems they are more likely to engage actively and constructively with the counsellor (Prochaska, Norcross, et al., 1994). This suggests that clients in the lower stages of change may invest less in the therapeutic relationship. Therefore, dialoguing with these clients concerning their ambivalence to working on their problems may assist in strengthening the working alliance, while also reducing the chances of premature termination (Rochlen, Rude, & Baron, 2005).

Stages of Change

There are five distinct stages of change that emerged from the original work of McConnaughy, Prochaska, and Velicer (1983) and have since been the principal means for measuring the TTM. These stages, which indicate an individuals' readiness to change include: Precontemplation, Contemplation, Preparation, Action, and Maintenance. According to Prochaska and DiClemente (1992b) these five stages "represent specific constellations of attitudes, intentions, and/or behaviours that are relevant to an individual's status in the process of change" (p. 185). The stages are also theorized to contain a unique perspective about the therapeutic process (McConnaughy, DiClemente, Prochaska, & Velicer, 1989). This implies that knowing clients' stage of change can provide both proscriptive and prescriptive information on the therapeutic interventions of choice. For instance, studies have shown that using action-oriented interventions is quite effective for clients in a higher stage of change, but is ineffective or detrimental for clients in lower stages (Prochaska, DiClemente, & Norcross, 1992).

Although successful clients have been found to progress in a linear fashion through the stages over the treatment period, the TTM has been illustrated as a vertical

spiral relationship (Prochaska & DiClemente, 1992b). Conceptualizing it in this manner allows for movement that is relatively forward and sequential, but also accounts for the possibility of stage regression or the revisitation of certain stages later in the change process (Prochaska, DiClemente, & Norcross, 1992).

Working Alliance

Of all the therapeutic components, the working alliance has been deemed the "quintessential integrative variable" (Wolfe & Goldfried, 1988, p. 449), as its value is not specifically tied to any particular theoretical orientation. It is also recognized as the most influential of the common factors in psychotherapy and has been studied the most extensively (Horvath & Bedi, 2002; Horvath & Greenberg, 1994; Lambert & Barley, 2001; Martin et al., 2000). There have been various definitions of what constitutes the alliance. The general consensus is the working alliance captures the collaborative relationship between the client and counsellor and incorporates the capacity to negotiate a contract that suits the type of therapy (Bordin, 1994; Horvath & Greenberg, 1989; Marmar, Weiss, & Gaston, 1989; Orlinsky, Ronnstad, & Willutzki, 2004). Therefore, the working alliance is not a reflection of therapeutic progress, but is a window into the dynamics that exist between the client and counsellor.

Numerous studies have stressed the importance of establishing a strong working alliance. For example, it has been shown that establishing a positive working alliance within the first three sessions helps prevent premature termination (Rainer & Campbell, 2001; Salta & Buick, 1989). In addition, there have been a multitude of studies showing that the working alliance is predictive of therapeutic outcome (Barber, Connolly, Crits-Christoph, Gladis, & Siqueland, 2000; Blatt, Zuroff, Quinlan, & Pilkonis, 1996;

Horvath & Bedi, 2002; Martin et al., 2000; Lambert & Ogles, 2004; Orlinsky, Grawe, & Parks, 1994). It is through agreement on the tasks and goals early in the therapeutic process that a strong alliance is maintained and continuance in psychotherapy is promoted (Horvath, 1995).

Psychological Distress

An important determinant to whether psychotherapy services are effective is the client's therapeutic outcome. According to Orlinsky et al. (2004) outcome is "a clinical concept signifying some degree of improvement or deterioration in the patients' condition, as judged from some observers' perspective by some value criterion" (p. 316). One facet of therapeutic outcome involves assessing client's improvement in psychological distress levels throughout psychotherapy. This is often done by measuring psychological distress both pre- and post-counselling and finding the difference between the two scores. However, outcome does not necessarily have to be evaluated at termination or predetermined follow-ups (Orlinsky et al.). In fact, Orlinsky et al. argue that outcome can be assessed after any psychotherapy session or sporadically throughout the therapeutic process, as its focus depends on the level of analysis being considered. Another important aspect to consider when conducting psychotherapy research is the observational perspective of the individual reporting the outcome. This is crucial as outcome can have varying, but still equally valid, meanings from the perspective of the client, counsellor, or expert nonparticipant (Orlinsky et al.). In this study, client's perceptions of their own emotional well-being and psychological distress levels were used instead of an outsider perspective and outcome was measured

by investigating the amount of symptom improvement (change in psychological distress levels from pre- to post-counselling).

Statement of the Problem

Although many studies have shown that the working alliance is a vital ingredient in the therapeutic process, there has been minimal research investigating it as a possible mediating variable between the stages of change and therapeutic outcome. Investigating the working alliance as a mediating variable in this relationship is important as it is impacted by the stages of change (Henry & Strupp, 1994; Principe, 2005; Taft et al., 2004) and is one of the main predictive factors in therapeutic outcome (Gaston, 1990; Horvath & Luborsky, 1993; Horvath & Symonds, 1991; Martin et al., 2000).

Despite empirical evidence of the TTM's valuable therapeutic properties, there are relatively few research studies that have assessed whether the stages of change are generalizable to clients in psychotherapy (Derisley & Reynolds, 2000; Dozois, Westra, Collins, Fung, & Garry, 2004; Lichner, 2002; Prochaska, Rossi, & Wilcox, 1991; Radcliffe, 2005; Rochlen et al., 2005; Scott & Wolfe, 2003; Treasure, et al., 1999). Instead, the majority of research has investigated addiction and health behaviours including smoking cessation (DiClemente et al., 1991; Keller, Nigg, & Jakle, 1999; Prochaska & DiClemente, 1986), alcohol and substance rehabilitation (Al-Otaibi, 1999; Belding, Iguchi, & Lamb, 1996; Davidson, Rollnick, & MacEwan, 1991; DiClemente & Hughes, 1990; Donovan & Marlatt, 1988; Tsoh, 1995), and dietary issues and weight control (Povey, Conner, Sparks, James, & Shepard, 1999; Prochaska, Norcross, Fowler, Follick, & Abrams, 1992; Rossi, Rossi, Velicer, & Prochaska, 1995). Although these studies have added valuable information to our understanding of the change process,

they mainly focused on validation and therefore did not investigate the clinical utility of the stages of change (Petrocelli, 2002).

Furthermore, in the few psychotherapy studies that investigated the stages of change the researchers measured it only once throughout the therapeutic process. This suggests they did not treat the stages as a variable that is likely to change over time (e.g. Derisley & Reynolds, 2000; Rochlen et al., 2005). As a result of these limitations, little is currently known about the applicability of the TTM to psychotherapy contexts. Conducting further studies that examine the role of TTM in individuals with a broader range of presenting concerns will allow researchers to determine its overall validity for understanding the psychotherapy change process.

Studying the relationships between therapeutic process and outcome variables is crucial to understanding the change process in psychotherapy and can lead to improvements in counselling services. It seems especially important to study the stages of change throughout psychotherapy as having some notion of clients' readiness to change at different stages in the therapeutic process could help mental health practitioners to tailor their interventions. Being more attuned to the clients' stage of change may lead to improvements in the strength of the working alliance and in therapeutic outcome. The results of this study could also have important clinical implications as assessing and assisting clients' to progress through the stages could increase both the therapeutic and cost effectiveness of psychotherapy.

Overview of the Study

The following chapter addresses the research literature on the TTM, the stages of change, and the working alliance. It specifically focuses on developing the theoretical

and empirical support that underlies the relationship between the stages of change, working alliance, psychological distress, and symptom improvement. Also investigated is the research evidence for conducting a longitudinal study by measuring these variables throughout the therapeutic process. The literature review closes with a summary of the purpose of this present study in light of the limitations of recent research and a delineation of the hypotheses that were investigated. In chapter three a description of the study methodology is presented including the demographic characteristics of the sample, instruments used to measure the variables, research procedure, and statistical analyses implemented to address the proposed hypotheses in this study. The results of these analyses are then described in chapter four. The findings of this study in relation to existing research are discussed in the final chapter, along with the implications of these findings, the limitations of this study, and directions for future research.

CHAPTER II

Literature Review

The following provides an overview of the research literature regarding therapeutic process and outcome variables that have been investigated in psychotherapy research. Included are overviews of the transtheoretical model (TTM) and the stages of change as investigated in health-related and addiction populations. A discussion of recent studies that applied TTM to the field of psychotherapy will also be integrated. Furthermore, research investigating the working alliance in psychotherapy will be examined, focusing in particular on its relation to both the stages of change and therapeutic outcome. Also discussed are the few psychotherapy studies that investigated the stages of change throughout the psychotherapy process.

This overview will allow the reader to gain a better understanding of TTM and its potential for psychotherapy research and practice. Specifically, it will assist in explaining the rationale for why the working alliance will be investigated as a mediating variable in this study. It will also highlight the ways in which this study will add to and expand upon recent research on the stages of change, working alliance, and therapeutic outcome.

Development of a Transtheoretical Model

The TTM was created through the combination of two theories of behavioural action or change. The first of these theories was proposed by Horn and Waingrow (1966) and suggested there were four steps for engaging in self-protective health behaviour. The first two steps involve having the awareness that there is a threat and identifying that the threat is important enough to warrant attention. The third step

consists of deciding if the threat is personally relevant and if it is, then the fourth step involves deciding to act against it. The authors noted that the absence of any one of these steps would prevent the individual from following through with the required action. This suggested each step was necessary, but not sufficient for successful behaviour change. In conceiving of self-protective behaviour in this way, the authors proposed individuals thought about the problem they were facing before engaging in any behavioural change. In later years, Horn (1976) worked at refining his theory and in doing so named the four steps the contemplation of change, the decision to change, short-term change, and long-term change.

Expanding on Horn's theory, DiClemente and Prochaska (1982) began to develop the TTM by investigating the therapeutic elements that were common among the differing schools of psychotherapy. At this time the field of psychotherapy had fragmented into more than three hundred theories and researchers were searching for a systematic integration of the field that would respect the fundamental diversity and essential unity of the various psychotherapy systems (Prochaska, 2000). The goal was to create a model that would draw from all of the major psychotherapy theories; a truly "transtheoretical" model (Prochaska & Norcross, 2003).

The creation of the TTM was guided by a set of strict criteria. The first criterion to be met was an integration of the diversity and unity of the various psychotherapy systems, ensuring the unique contributions of each system were preserved. It was believed that reducing systems to their least common denominator stripped them of their richness and that practice and theory must remain intact (Ginter, 1988, 1996; Prochaska & Norcross, 2003). Secondly, the developers sought a model that was

grounded in empiricism and consisted of components that were reliable and valid in the various contexts in which the model would be used. The third criterion was that the model was to account for how people changed with or without treatment. Thus, the TTM is considered truly distinctive in that it has incorporated an understanding of self-change dynamics (Sobell, Cunningham, & Sobell, 1996; Tucker, 1995; Watson & Sher, 1998). This was important to the developers as it was found many people do not ever contact professionals for assistance (Veroff, Douvan, & Kulka, 1981). The fourth criterion for the development of the model was to ensure it could be generalized to a broad range of problems, including both physical and mental health concerns. Finally, the model was created to prevent psychotherapists from simply borrowing from other psychotherapy systems and instead encourage them to become innovators of their practice (Prochaska & Norcross). Based on these criteria, the TTM should not be considered a theory of counselling and instead should be conceptualized as an empirically validated model of general change (Petrocelli, 2002).

Like Horn had proposed, Prochaska and DiClemente believed successful change only occurred by first going through a series of stages. To test their stage of change hypothesis, DiClemente and Prochaska (1982) compared 29 smokers who attempted self-change with 19 smokers in aversion therapy and 16 smokers in behaviour management. They hypothesized participants would progress through three stages before they reached abstinence (a) deciding to change, (b) active change, and (c) maintenance of change. Overall, it was found that rates of abstinence and relapse were similar among all three groups. Although DiClemente and Prochaska did not find empirical support for their initial hypothesis, they did discover that participants found

verbal interventions more successful at the deciding to change stage, while behavioural interventions were more effective during the active and maintenance stages. The authors concluded individuals attempting to change found certain intervention techniques more successful as they progressed through each stage.

The Transtheoretical Model

For over 20 years, a vast amount of research based on the transtheoretical model (TTM) has provided health practitioners with empirically validated suggestions for working with differing types of clients (McConnaughy et al., 1983; Prochaska, 1979; Prochaska & DiClemente, 1983). The model is able to provide this information as its structure acknowledges the importance of a developmental perspective for change instead of a theoretical approach focusing on personality characteristics or behaviours that predict change processes (Petrocelli, 2002).

The TTM was originally developed as an integrative approach for psychological problems. It is based on the premise that change is a dynamic process and occurs by utilizing the processes of change at different stages (Carbonari, DiClemente, Addy, & Pollak, 1996). The TTM also rests on the assumption that clients enter therapy with varying degrees of readiness to change their problems. Readiness has become known among practitioners as an important prerequisite to achieve a successful therapeutic outcome (Heather, 1992; Prochaska & DiClemente, 1982). Moreover, one of the most frequently cited reasons for premature termination or relapse during treatment is a lack of readiness to change (Ryan, Plant, & O'Malley, 1995).

In creating the TTM, a comparative analysis of the leading theories of psychotherapy and behaviour change was conducted. Out of this analysis ten processes

of change were identified, along with five levels and five stages of change. The model became known as "transtheoretical" as it uses these stages to integrate the processes and principles of change across all the major theories of intervention (Prochaska, 1979). There have been several versions of the model produced with the most common form including five stages: Precontemplation, Contemplation, Preparation, Action, and Maintenance. Although some researchers criticize the use of stage based models, Prochaska (2000) argues that stages are fundamental to the understanding of change. He advocates the use of stages as they provide a temporal dimension, which is central to the change process as it is a phenomenon that unfolds over time. He also reasons that stages are a key concept as they have a stable quality that tends to endure over long periods of time, but are also dynamic and open to change. This relates to the types of problems often brought into psychotherapy, as they often have the dual nature of being both open to change and stable over time (Prochaska, 2000).

Despite being initially developed with psychotherapy in mind, the majority of research to date on the TTM has focused on its relevance to a variety of behavioural concerns including smoking cessation (DiClemente et al., 1991; Keller et al., 1999; Prochaska & DiClemente, 1986), dietary concerns (Povey et al., 1999; Rossi et al., 1995), bulimia nervosa (Franko, 1997), problematic exercise (Burn, Naylor, & Page, 1999; Marcus et al., 1998; Peterson & Aldana, 1999), and substance abuse (Al-Otaibi, 1999). Although these studies mainly investigated addiction populations, the positive outcomes of this research have led to a recent interest in the applicability of the TTM to a broader range of issues (Derisley & Reynolds, 2000; Satterfield, Buelow, Lyddon, & Johnson, 1995; Rochlen et al., 2005).

The Spiral Pattern of Change

The TTM was originally conceptualized as a linear stage model as it was believed people progressed simply and discretely through each stage of change (Prochaska, DiClemente, & Norcross, 1992). It is now thought that a linear progression through the stages is a relatively rare phenomenon and is not realistic for many individuals during their treatment. As a result, a new model was designed and conceptualized as a vertical spiral pattern (DiClemente & Hughes, 1990; DiClemente & Prochaska, 1998). In this model, individuals can progress in a linear fashion through each of the stages, but the use of the spiral pattern also accounts for clients who regress to earlier stages during the change process.

The regression to earlier stages has been investigated in addictions populations and involves a relapse back to a lower stage of change (Prochaska, 2000). Before relapsing, many individuals experience feelings of embarrassment, shame, and guilt. With these feelings of demoralization and failure, individuals return to a resistance in thinking about change and in doing so relapse back to an earlier stage where they can remain for varying amounts of time (Prochaska).

In support of the new conceptualization of the model, it was discovered in addictions research that many individuals do not successfully maintain the gains they have made on their first attempt at changing maladaptive behaviours. For example, Schachter (1982) found smoking self-changers made an average of three to four action attempts before ever moving into a long-term maintenance stage. It has also been found that many New Year resolvers reported around five or more consecutive pledges before they maintained a behavioural goal for at least six months (Norcross & Vangarelli,

1989). Moreover, Prochaska and DiClemente (1984) found approximately 15% of smokers who had relapsed regressed back to the precontemplation stage, while 85% fell back to the contemplation and preparation stages. Although the spiral pattern seems to help explain the complexity of the change process more clearly, additional studies are needed to explain the idiosyncratic movements people make through the stages of change and to investigate the applicability of the spiral model in mental health populations (Prochaska, DiClemente, & Norcross, 1992).

The Stages of Change

The central components of the TTM are the stages of change. The stages are a way of dividing up the change process into "meaningful steps consisting of tasks required to achieve successful, sustained behavior change" (DiClemente & Prochaska, 1998, p. 4). There have been several lines of research supporting the stages of change construct in both outpatient therapy clients and self-changers (DiClemente & Hughes, 1990; DiClemente & Prochaska, 1985; DiClemente, Prochaska, & Gibertini, 1985; Lam, McMahon, Priddy, & Gehred-Schultz, 1988; McConnaughy et al., 1989). During the development of the TTM, attempts were made to assess how frequently individuals were applying the change processes during self-change and in psychotherapy. In discussions with study participants, it was observed that individuals were not able to give a definitive answer as they used different processes of change at various points in the change process (Prochaska & Norcross, 2003). These points became known as the stages of change and are composed of unique groupings of attitudes, intentions, and behaviours related to the individual's position in the change process. Each stage

represents a period of time that varies for each individual and a set of required tasks that are invariant for movement to the next stage (Prochaska & Norcross).

In the initial research conducted by Prochaska and DiClemente (1982), five stages of change were identified. However, when principal component analyses were conducted they found only four scales and misinterpreted the findings as suggesting there were only four stages of change (McConnaughy et al., 1989; McConnaughy et al., 1983). As a result, there were several years when the four stage model, which omitted the preparation stage, was the most widely used (Prochaska & DiClemente, 1983, 1985). Later, when continuous measures were applied to these same studies, cluster analysis identified groups of individuals who were in the preparation stage, scoring high on both the contemplation and action scales (McConnaughy et al., 1989). Over the last twenty years, numerous studies have supported measuring preparation as the fifth stage of change (DiClemente et al., 1991; Prochaska & DiClemente, 1992b).

Precontemplation stage. Clients in the precontemplation stage are characterized as resistant to initiate change and also to recognizing they have a problem that needs resolution (DiClemente, 1993; Prochaska, DiClemente, & Norcross, 1992). Precontemplators feel a need to change others or the environment in which they reside and often feel pressured into entering psychotherapy by family, friends, or employers (Brogan, Prochaska, & Prochaska, 1999). These clients are frequently not ready for psychotherapy as they underestimate the benefits of change and overestimate the costs (Prochaska, Velicer, et al., 1994). Often attempts at change are only made out of coercion or feared consequences (Rainer & Campbell, 2001).

Precontemplators are often characterized by health practitioners as resistant or unmotivated (Prochaska & Norcross, 2003). As they are not conscious of their maladaptive behaviours it is often difficult for them to change. Therefore, precontemplators can remain stuck in this stage for extended periods of time. Some items that are used to distinguish the precontemplation stage on the University of Rhode Island Change Assessment (URICA) scale, a measure used to assess the stages of change, are "As far as I am concerned, I don't have any problems that need changing" and "I guess I have faults, but there's nothing that I really need to change" (McConnaughy et al., 1983).

As clients in the precontemplation stage are not thinking about changing their behaviour in the near future, they are also not willing to engage in any change oriented interventions. If a client in the precontemplative stage is working with a counsellor whom is directive and action-oriented, there is a greater likelihood that the client will prematurely terminate (Rainer & Campbell, 2001). In order for individuals in the precontemplation stage to move to the next stage of change they are required to acknowledge the problem, increase their awareness of its negative aspects, and evaluate their self-regulating capacities (Prochaska & Norcross, 2003).

Contemplation stage. Individuals in the contemplation stage can be distinguished from those in the precontemplation stage as they are cognizant of their presenting concerns and are in psychotherapy to seek information and feedback about their problems (Redding et al., 1999). This awareness does not suggest that contemplators are ready to begin the change process as many are unsure of whether their problems are even resolvable (DiClemente, 1993; Prochaska, DiClemente, &

Norcross, 1992). Contemplators are involved in weighing the pros and cons of change; however, at this stage the positives and negatives are seen as nearly equal (DiClemente & Prochaska, 1998). Having a balance between the costs and benefits of changing can produce profound ambivalence for extended periods of time, often resulting in chronic contemplation (Prochaska, 2000; Prochaska & Norcross, 2003). A study utilizing a sample of 200 smokers highlighted the extent of chronic contemplation as the majority of individuals in this study remained in the contemplation stage for the whole two year period (DiClemente & Prochaska, 1985; Prochaska & DiClemente, 1984).

Similar to those in the precontemplation stage, contemplators are also uncommitted to change and therefore not as likely to engage in behavioural activities (Rainer & Campbell, 2001). Often contemplators struggle with the amount of effort, energy, and personal costs that are involved to overcome their problem (DiClemente, 1991; Prochaska & DiClemente, 1992b; Velicer, DiClemente, Prochaska, & Brandenburg, 1985). Nevertheless, clients in this stage are willing to explore their change options and discuss interventions that may help them to reach their goals. Individuals in the contemplation stage agree with statements on the URICA scale such as "I have a problem and I really think I should work on it" and "I've been thinking that I might want to change something about myself" (McConnaughy et al., 1983). As this stage involves thinking about the personal implications of the change process, it is similar to Horn's (1976) contemplation stage of change.

Preparation stage. Individuals in the preparation stage intend to move into action in the immediate future and have already reported experiencing some smaller behavioural changes (Prochaska & Norcross, 2003). Despite making some minor

changes, individuals at this stage are not quite ready to take full action such as complete abstinence from their problem behaviour (Redding et al., 1999). This stage is the end point of the individual's decision making process that started during the contemplation stage (DiClemente & Prochaska, 1998). It is at the preparation stage individuals decide their negative behaviours are causing them considerable distress and changing them would be beneficial (DiClemente, 1993; McConnaughy et al., 1983). On the URICA scale, these individuals score high on both the contemplation and action scales. This stage is very similar to Horn's (1976) decision to change stage, as it involves committing to begin the change process in the near future.

Action stage. Clients in the action stage have begun to work on changing their problem behaviours and may attend therapy looking for assistance in implementing strategies to reach their goals. The action stage involves carrying out the plan that was previously developed during the preparation stage (DiClemente, 1993). In this stage individuals are working to modify their behaviour, experiences, or environment in hopes of overcoming their problems (Prochaska, DiClemente, & Norcross, 1992). These clients are actively involved in making changes, are able to commit themselves to positive modifications in their own lives, and take personal responsibility for the various choices presented (Rainer & Campbell, 2001). This stage is similar to Horn's (1976) short-term change stage in that individuals are implementing the actions necessary to begin the change process, but the level of change that is desired has not been fully achieved. Relapses during this stage are quite common as the change process is still new and difficult to sustain (Redding et al., 1999).

The most overt changes are made during the action stage and require considerable time, effort, and energy to implement. Often others, including professionals, incorrectly believe that action is equivalent to change (Prochaska, DiClemente, & Norcross, 1992). This incorrect conceptualization of the action stage leads practitioners to underestimate the amount of work that goes into preparing the individual for action and the substantial effort needed to maintain these changes after the action is implemented (Prochaska & Norcross, 2003). In the action stage, clients would agree with these statements on the URICA scale: "I am really working hard to change" and "Anyone can talk about changing; I am actually doing something about it" (McConnaughy et al., 1983).

Maintenance Stage. Clients in the maintenance stage have already made significant changes to their problems and are in psychotherapy to solidify their gains, continue their progress, and prevent relapses into maladaptive ways of functioning (Prochaska, DiClemente, & Norcross, 1992). This is not a static stage, as was once believed, but is the most active and important stage in continued change (Prochaska & Norcross, 1999). The effort during this stage is focused on integrating new changes into the individual's everyday life (DiClemente, 1993; DiClemente & Prochaska, 1998). However, most people do not successfully maintain their gains on their first attempt. Many individuals require several cycles through the stages of change before they are able to experience long-term maintenance (Schachter, 1982).

Although changes are becoming more habitual and the actual risk of relapse is lower, prevention of relapses is still required during this stage (Redding et al., 1999). A relapse can result if a client is unable to maintain the changes that have occurred, which

can activate a sense of hopelessness and an unwillingness to want to try again. Being able to stabilize behaviour change and avoid falling back into maladaptive behaviours are the crucial aspects of the maintenance stage (Prochaska & Norcross, 2003). Statements on the URICA that represent someone in the maintenance stage include: "I may need a boost right now to help me maintain the changes I've already made" and "I'm here to prevent myself from having a relapse of my problem" (McConnaughy et al., 1983). This stage is similar to Horn's (1976) long-term change.

Matching Stage of Change and Type of Treatment

Not only does knowing the clients' stage of change help the client, it also helps the practitioner to select the type of treatment that would be the most effective for a particular client at a particular time. For example, action-oriented therapies are more effective with individuals who are in the preparation or action stage, while these same treatments are counterproductive with clients in the precontemplation or contemplation stages (Ockene, Ockene, & Kristellar, 1988; Prochaska, 2000; Prochaska, DiClemente, & Norcross, 1992).

The importance of matching pretreatment stage of change to the type of therapy offered was highlighted in a study investigating a population of cardiac patients that were also smokers (Ockene et al., 1988). It was found that of those who began therapy in the preparation or action stages and received an action-oriented smoking cessation program, 94% were not smoking at a six month follow-up. In contrast, only 66% of those receiving regular care without the action-oriented program had quit. Moreover, the action-oriented program had absolutely no effect on clients in the precontemplation

or contemplation stages, while regular care did as well or better for these individuals (Ockene et al.).

A similar study found the same effect with a self help smoking cessation program for pregnant women (Ershoff, Mullen, & Quinn, 1987). This program was successful for women in the preparation and action stages, but had a negligible impact on those in the precontemplation stage. Comparable results were also found in a study investigating individuals with drug and alcohol problems. It was discovered that participants in the early stages of change preferred non-action-oriented therapeutic interventions, while participants in the later stages favored action-oriented interventions (Giovazolias & Davis, 2005). Furthermore, it was found that when treatment is matched to clients' stage of change, precontemplators continue to engage in the treatment process at the same high rate as those who began treatment in the preparation stage (Prochaska, DiClemente, Velicer, & Rossi, 1993).

These studies highlight the importance of knowing clients' stage of change in order to match the type of treatment offered (DiClemente, 1991; Prochaska, 1991). Thus, one major advantage of the TTM is that it has provided an understanding of how, when, and where different therapeutic techniques and interventions should be applied to best assist individuals through the change process (Rossi et al., 1995).

Research Findings on the Initial Stage of Change

Clients entering treatment demonstrate a variety of profiles on the scales used to measure the stages of change (DiClemente & Hughes, 1990; McConnaughy et al., 1989). For example, it has been found that 50 to 60% of people entering various types of treatment are in the precontemplation stage, while 30 to 40% are in the

contemplation stage and only 10 to 15% are in the action stage (Abrams, Follick, & Biener, 1988; Gottleib, Galavotti, McCuan, & McAlister, 1990). These findings suggest that individuals obtaining health services do not begin treatment with the same degree of readiness to change. Knowing clients' initial stage of change when entering treatment is valuable information for a counsellor as previous studies have shown it impacts the level of psychological distress reported, the strength of the working alliance, and therapeutic outcome (McConnaughy, 1985; Prochaska, 2000).

Initial Stage of Change, Psychological Distress, and Therapeutic Outcome

In order to assess therapeutic outcome, clients' level of psychological distress is often measured both pre- and post-treatment. In past research studies that have assessed the stages of change and therapeutic outcome, it was found that clients' pre-treatment level of distress and the success of their treatment outcome depended on their initial stage of change.

The results of studies that investigated clients' pretreatment stage of change and self-reported symptom distress indicated that clients in the precontemplation stage reported low levels of symptom distress, while clients in the action and maintenance stages reported moderate levels (McConnaughy, 1985; O'Hare, 1996). Despite reporting lower levels of psychological distress at pretreatment, precontemplators often do not have successful treatment outcomes. Numerous studies have shown that clients who presented to therapy in either the action or maintenance stages had a better therapeutic outcome than clients in the precontemplation or contemplation stages (Franko, 1997; McConnaughy et al., 1984; Treasure et al., 1999; Wolk & Devlin, 2001). This effect has been shown immediately after an intervention and at 12 to 18 months

after its implementation (Prochaska et al., 1993). In fact, stage of change prior to treatment is a better predictor of outcome than either the severity of symptoms or the individual's diagnosis (McConnaughy et al.). These results have been observed in a multitude of populations including brain-impaired patients in rehabilitation programs (Lam et al., 1988), individuals enrolled in community programs for smoking cessation (Gottlieb et al., 1990), cardiac patients undergoing counselling (Ockene et al., 1992), and panic disordered patients receiving anti-anxiety medication (Beitman et al., 1994).

One of the explanations for these findings is that clients in the precontemplation stage do not recognize they have a problem, leading them to ignore problem behaviours and cognitions and to place blame on external environmental sources. In contrast, clients in the later stages of change are more cognizant of their presenting difficulties, ready to begin the change process, and committed to the goals and tasks necessary to implement the changes. Therefore, they often experience a greater relief in symptoms and a better treatment outcome than clients in the precontemplation or contemplation stages (McConnaughy et al., 1984).

URICA in health and addictions populations. The University of Rhode Island Change Assessment scale (URICA) was developed to measure the stages of change and has become one of the most widely used continuous measures of change. It was originally created to be applicable to a broad range of problems (McConnaughy et al., 1983). However, it has been mainly investigated in health and addiction populations such as substance abuse (e.g. Project MATCH Research Group, 1997), exercise and weight control (e.g. Donovan, Jones, Holman, & Corti, 1998), and bulimia nervosa (e.g. Treasure et al., 1999). One of the main reasons for investigating the TTM in addiction

and health populations is that behaviours can be directly measured. Measuring observable behaviours, such a substance abuse, allows the researcher to directly monitor the changes made over the treatment period. It also permits for less ambiguity in clients' responses as they may be more aware of their presenting concerns and can more readily answer questions about them.

There have been numerous studies investigating the TTM in smoking cessation programs as tobacco use can be directly monitored. Overall, these studies found initial stage of change is related to the success of the treatment outcome. For example, one study investigated 570 smokers to determine what percentage had abstained from smoking for 18 months (Prochaska & DiClemente, 1992a). It was found that the ability to abstain was directly related to pretreatment stage of change. Another study investigating a smoking cessation program for cardiac patients found similar results. Patients that had quit smoking at six months were composed of 22% of the individuals that had initially been in the precontemplation stage, 43% originally in the contemplation stage, and 76% initially in the preparation or action stages (Ockene et al., 1988). Additionally, Dijkstra, Roijackers, and DeVries (1998) found smokers who began treatment in a higher stage of change had a larger percentage of successful quitters at both a 3 and 14 month follow-up when compared to individuals with a lower readiness at pretreatment.

The stages of change have been found to be related to treatment outcome not only in smoking cessation populations, but also in populations of individuals with substance abuse and health-related concerns. Willoughby and Edens (1996) used the URICA to explore if the profiles it produced could be used to identify clinically

meaningful subtypes in a population of 114 individuals seeking alcoholism treatment. As was hypothesized, those with a precontemplation profile were less worried about their alcohol use and less receptive to assistance than those in the higher stages of change. In another study, Prochaska, Norcross et al. (1992) administered the URICA to 30 overweight hospital staff members in a weight loss program. During the treatment contemplation scores significantly decreased and action scores significantly increased, leading the authors to conclude that having higher action stage scores was associated with successful weight loss.

In contrast, some studies using the URICA in health-related populations have found that it does not predict treatment outcomes. For example, in a study measuring readiness to change substance use in a sample of 115 patients from community treatment clinics, it was discovered that participants' pretreatment stage of change scores were not related to treatment outcome (Legerwood & Petry, 2006). Another study found similar results in a population of alcoholics (Hart, 2005). Treatment outcomes were found to be unrelated to stage of change scores, leading the author to conclude the URICA has limited clinical utility.

Mixed results have been found in studies investigating the use of TTM in health samples (Littell & Girvin, 2002). Nonetheless, many of these studies have generated substantial support for the predictive validity of the stages of change and for the URICA in numerous problem behaviours (Prochaska, Norcross, et al., 1994). More importantly, they have also suggested that knowing and enhancing individuals' readiness to change by moving them into a higher stage can increase the likelihood of a positive outcome.

Further studies are needed to determine if the stages of change are as effective in predicting therapeutic outcomes in psychotherapy populations.

URICA in mental health populations. Despite being developed for use in general clinical populations, the URICA has been investigated in relatively few mental health populations. Although there have been few studies conducted, initial research has shown supportive evidence for the use of the URICA in psychotherapy. For instance, the psychometric properties of the URICA were investigated in a sample of self-reported anxious undergraduates and in a population of individuals with panic disorder receiving cognitive behavioural therapy (Dozois et al., 2004). In the undergraduate population, the reliability and validity of the URICA was generally supported, although the goodness-of-fit with the subscales was only found to be moderate. In the individuals with panic disorder, the URICA had excellent reliability, significantly predicted treatment retention and premature termination, and was modest in predicting treatment outcome.

In addition to finding some supportive evidence for the psychometric properties of the scale in a psychotherapy context, the stages of change have also been found to predict treatment retention (Brogan et al., 1999; Smith, Subich, & Kalodner, 1995) and treatment outcome in general outpatient populations (Beitman et al., 1994; Reid, Nair, Mistry & Beitman, 1996). For example, Beitman et al. and Reid et al. did two separate studies investigating the treatment of panic disorders. They found individuals at a lower stage of change had significantly fewer reductions in their anxiety, while those in the higher stages experienced much greater reductions. Using a population of male batterers, Scott and Wolfe (2003) also examined the stages of change as a predictor of

therapeutic outcome. They found that men in the precontemplation stage showed little positive change in empathy, communication, and abusive behaviour, while men in the action and maintenance stages experienced positive outcomes at termination.

In contrast, some studies using mental health populations have not supported the stages of change as a predictor of therapeutic outcome. Lumpe (2001) investigated 1700 students at a university mental health clinic and found an association between symptoms and stage of change at the intake session, but found no relationship at the termination of psychotherapy. Similarly, Carter-Sand (2004) explored the stages of change as a predictor of therapeutic outcome in 70 individuals with anxiety disorders. The author found participants responded similarly to the URICA regardless of the success of their outcomes.

In general, research conducted in both addiction and mental health populations has found that the initial stage of change is related to treatment outcome. Unfortunately, a relatively sparse number of studies have investigated this relationship in psychotherapy clients. In addition, a few studies found mixed empirical support for the use of the URICA and did not find a relationship between the stages of change and outcome. Further research is required to clarify the nature of this relationship and the applicability of the URICA to a psychotherapy context.

Conceptualizations of the Working Alliance

The working alliance is one of the most vital ingredients in psychotherapy and is an extremely rich, yet deceptively simple concept (Safran & Segal, 1996). Greenson (1967) invented the term working alliance, which he simply defined as the relationship between the client and counsellor. Luborsky (1976) expanded the definition to include

"the patient experiencing the therapist as supportive and helpful with him/herself as a recipient" (p. 94). The importance of the working alliance can not be understated as it is the greatest area of convergence among psychotherapists when selecting common factors and is their first choice as a treatment recommendation (Grencavage & Norcross, 1990; Horvath & Bedi, 2002; Horvath & Greenberg, 1994; Lambert & Barley, 2001; Lambert & Ogles, 2004; Martin et al., 2000; Norcross, Saltzman, & Guinta, 1990). Many researchers and clinicians have stressed the importance of the working alliance in the therapeutic process, and it has been concluded that "the quality of the relationship between therapist and patient essentially influences the course and outcome of psychotherapy" (Hougaard, 1994, p. 83).

Although the working alliance has its origins in psychoanalytic theory, Carl Rogers (1957) was one of the first theorists to describe the working alliance as the key ingredient in the change process. He proposed a set of criteria that were necessary components of a strong relationship and these included that the counsellor (a) be congruent with the client, (b) provide the client with unconditional positive regard, (c) relate with accurate empathy, and (d) act in a genuine manner (Rogers). Therefore, according to Rogers it is not the techniques used in therapy, but the characteristics of the counsellor and the ways of relating to the client in a positive relationship that produce change.

Bordin (1979) also emphasized the importance of the working alliance and claimed that it could be stated "in forms generalizable to all psychotherapies" (Bordin, 1979, p. 253). With this in mind, he developed a model to define the components that made up the quality and strength of all alliances. His tripartite model features three

components: tasks, goals, and the bond. The tasks are the behaviours and cognitions that compose the majority of the therapeutic process. They represent what is to be completed in therapy and how interventions will contribute to the cessation of clients' issues (Horvath, 1995). The goals are the target of the interventions and are the decided upon outcome expectations established by the client and counsellor. The last component is the bond, which is the positive attachment between the client and counsellor consisting of mutual trust, confidence, and acceptance (Bordin, 1980).

In a like manner to Rogers, Bordin argued that the power to achieve change and a successful therapeutic outcome is largely associated with the strength of the working alliance and that the positive alliance alone is not curative (Bordin, 1979; 1994). However, Bordin also argued that the working alliance assists in fostering the client's trust in the counsellor's perspective and leads to the acceptance of the therapeutic goals (Bordin, 1980). Engaging in discussions surrounding the goals, tasks and bond assists in promoting the collaboration that increases the client's commitment to the therapeutic process (Adler, 1988).

Horvath and Lurborsky (1993) also extensively studied the working alliance and endorsed its importance in successful therapeutic outcomes. They suggested that there are two separate and distinct phases in the working alliance. The first phase is the initial development stage that occurs for between three to five sessions. During this time trust and collaboration are built between the client and counsellor. There is also agreement on what needs to be accomplished (goals) and how it will be achieved (tasks). The second phase starts sometime after the fifth session and involves the counsellor working

on changing the client's old patterns of dysfunctional thinking or behaving and repairing breaks in the alliance.

Safran and Muran (2000) added to the conceptualization of the working alliance by including a process for maintaining and strengthening the alliance through repairs of ruptures throughout psychotherapy. They claimed that by "highlighting the critical importance of the real, human aspects of the therapeutic relationship, it has provided grounds for departing from the idealized therapist stance of abstinence and neutrality" (Safran and Muran, p. 13). Therefore, the authors believe the most critical component of the change process is a constructive relational experience with the counsellor. For this to occur, they endorse developing and resolving problems in the alliance as not only a prerequisite to change, but as a core element within the process of change. This involves a paradigm shift towards the dynamic nature of the alliance, specifically focusing on ongoing negotiation and maintenance throughout therapy. This conceptualization seems to overlap with interpersonal approaches to therapy in that the repair of difficulties that emerge between clients and counsellors can help clients to address their more general interpersonal struggles.

This new conceptualization of the working alliance has a number of implications for the counselling process. First and most importantly, this model has developed a framework for guiding interventions in a flexible manner and allows for investigations of ruptures essential to repairing the alliance before the client prematurely terminates (Safran & Muran, 2000). Being sensitive to ruptures in the alliance is of critical importance to the therapeutic relationship as they are often expressed in very indirect and non-verbal cues and their early detection can assist in building a stronger

therapeutic alliance. Another implication is the additional emphasis on the importance of client and counsellor negotiations regarding goals and tasks. Finally, it focuses on the interdependence of relational and technical factors within therapy, suggesting that interventions can only be evaluated in context to the situations in which they are applied (Safran & Muran).

Working Alliance and Therapeutic Outcome

For over 50 years, both researchers and practitioners have argued that the working alliance is one of the most important factors in the therapeutic process. In support of Rogers's initial hypotheses, a positive working alliance has been found to be related to successful outcome in numerous psychotherapy studies (Barber et al., 2000; Horvath & Bedi, 2002; Horvath & Symonds, 1991; Kivlighan, 1990; Kivlighan & Shaughnessy, 1995; Kokotovic & Tracey, 1990; Lambert, 1994; Martin et al., 2000; Orlinsky et al., 2004; Rainer & Campbell, 2001). In fact, Orlinsky et al. stated, "The strongest evidence linking process to outcome concerns the *therapeutic bond* or *alliance*, reflecting more than 1,000 process-outcome findings" (p. 360). This has led many researchers to conclude that the alliance not only reflects positive change, but produces it as well (Frank & Gunderson, 1990; Gaston, Marmar, Gallagher, & Thompson, 1991; Salvio, Beutler, Wood, & Engle, 1992; Tichenor & Hill, 1989).

According to Horvath and Luborsky (1993), the positive relationship between strong alliances and successful therapeutic outcomes has been reasonably well documented. Specifically, it has been found that across all types of psychotherapy the working alliance accounts for 12% of outcome (Horvath & Bedi, 2002). However, the results have varied as researchers have found correlations ranging from .20 to .45

(Luborsky, 1994). For example, in a recent meta-analysis of 79 studies a correlation of .22 was found, showing a moderate and consistent relationship between the working alliance and outcome (Martin et al., 2000). Lambert and Ogles (2004) believe that this evidence "strengthens arguments for common factors as mediators of change since outcome can be predicted from early alliance ratings" (p. 174).

As further support for the relationship between working alliance and outcome, a recent study by Jordan (2003) found several significant positive correlations between the Working Alliance Inventory (WAI) components (bond, tasks, and goals) and therapeutic outcome. This is equivalent to the meta-analytic study discussed above, where a moderate correlation ($r = .24$) between the WAI and outcome was also observed (Martin et al., 2000).

These studies provide additional empirical evidence that the therapeutic relationship is in itself therapeutic, regardless of the intervention (Henry, Strupp, Schacht, & Gaston, 1994). They also provide empirical support for a direct and consistent relationship between the working alliance and therapeutic outcome. More specifically, these studies reveal the existence of a moderate positive relationship between the WAI and outcome supporting its use in this study.

Working Alliance and Initial Stage of Change

Clients' stage of change and the working alliance are two concepts that have been recommended for further investigation in psychotherapy research, yet a small number of studies have explored their relationship in general outpatient populations (Principe, 2005). In the few studies that examined the relationship between these variables, it was found that clients' stage of change is an important precursor in the

ability to enter a relationship with the counsellor (Lukin, 1997). Additional empirical support has been provided for the importance of clients' stage of change, as the results of several studies have indicated that establishing strong working alliances with clients reluctant to deal with their problems is often very challenging (Bachelor & Horvath, 1999; Hatcher & Barends, 1996).

Treasure et al. (1999) explored the relationship between bulimic clients' initial stage of change and the working alliance and found that they rated the working alliance more favorably when they were in the action stage at pretreatment than in the other three stages. In a similar study using an adolescent population, Irannejad (2003) also found that the stages of change were related to the quality of the working alliance. The results indicated clients more actively ready to engage in change were also more likely to develop positive alliances and agree on the tasks and goals of therapy. In support of these findings, two additional studies discovered clients in the action stage were more likely than those in the precontemplation or contemplation stages to participate in self change, engage in treatment, and stay longer in therapy (Brogan et al., 1999; Prochaska, Norcross, et al., 1994). However, not all studies investigating these variables have found similar results. For example, an unpublished study by Lukin (1997) investigating 27 client-counsellor dyads in a private practice setting observed that initial stage of change was only slightly related to the working alliance when measured at the third or fourth session.

These studies have provided some empirical evidence for a relationship between initial stage of change and the working alliance, but there is at least one study that has shown conflicting evidence. Moreover, these studies only measured stage of change and

the working alliance once during psychotherapy. As both of these variables are likely to change over time, additional studies measuring these variables at multiple time points are needed to help understand the dynamic nature of their relationship.

The Working Alliance as a Mediating Variable in Psychotherapy

Investigating the working alliance as a mediator of the relationship between stage of change and symptom improvement was based on past research investigating the direct relationships between these variables. For example, past research has shown clients' initial stage of change is an important precursor in the ability to enter a therapeutic relationship (Henry & Strupp, 1994; Principe, 2005; Taft et al., 2004). It has been found to be very challenging to form a working relationship with clients that are reluctant to begin working on their problems or are ambivalent about the change process (Bachelor & Horvath, 1999; Hatcher & Barends, 1996). Past research has also found strong empirical evidence that the working alliance is positively related to therapeutic outcome (Barber et al., 2000; Horvath & Bedi, 2002; Horvath & Symonds, 1991; Kivlighan, 1990; Kivlighan & Shaughnessy, 1995; Kokotovic & Tracey, 1990; Lambert, 1994; Martin et al., 2000; Orlinsky et al., 2004; Rainer & Campbell, 2001). These studies suggest that the working alliance has a direct relationship with both clients' stages of change and symptom improvement.

The working alliance was also examined as a mediator in this study, based on a recent report examining the working alliance as a mediator between pretherapy expectancy of improvement and psychotherapy outcome (Joyce et al., 2003). This study used the Baron and Kenny (1986) procedure for analysis of mediational effects and found evidence of the hypothesized mediational effect. More specifically, this effect

was observed when the alliance was rated from the perspective of the client or therapist and was also found to account for one third of the direct impact of expectancy on therapeutic outcome (Joyce et al.). The results of this study suggest that investigating additional client variables and their impact on the working alliance may lead to further insights of the valuable role that the working alliance plays in the therapeutic process.

Stage of Change, Working Alliance, and Therapeutic Outcome in Psychotherapy

Relatively few studies have investigated the relationship between client stage of change, the working alliance, and outcome in psychotherapy clients. Derisley and Reynolds (2000) examined this relationship in a sample of 60 clients in a mental health care facility. They found action stage scores did not significantly predict session attendance or working alliance scores and precontemplation stage scores did not predict premature termination or unsuccessful outcomes. Instead, contemplation scores were positively associated with the working alliance and successful therapeutic outcomes after the first and third sessions. A similar study with a population of 400 adult clients from university counselling centers found clients in the precontemplation stage evaluated the working alliance less favorably, had less successful therapeutic outcomes, and were more likely to terminate prematurely (Rochlen et al., 2005). No differences were found among clients in the contemplation, action, and maintenance stages across any of the process and outcome measures used. The authors concluded the study provided some preliminary support for the stage of change model when applied to a psychotherapy population and for the importance of assisting clients in the lower stages of change.

Although these studies investigated the relationship between the same variables this present study used, they have a few important limitations. One significant limitation of these studies was that the largest sample of these two studies was from a population of university counselling centers. This limits the generalizability of the findings as the sample used was restricted to a student population and as such is not fully representative of the average psychotherapy population. The results of these studies suggest additional research may be warranted to clarify the relationship between the stages of change, working alliance, and therapeutic outcome throughout the therapeutic process in a more diverse psychotherapy population. Another limitation is that these studies were not longitudinal and as such only measured the stages of change once, prior to the first psychotherapy session. Thus, it is not known if there is a relationship between these variables at different points in the counselling process. Further studies are required to investigate whether there is stage movement over the course of psychotherapy.

Movement Across the Stages of Change

There have been numerous research studies in which client stage of change was measured only once, prior to the beginning of treatment. Conceptualizing the stages of change in this way implies they are stable traits that do not change over the course of therapy. However, the basic premise of most therapy is to help individuals with lower levels of decision and commitment to progress to a stance of commitment to, and engagement with, action and change. Although past studies have made a substantial contribution to the literature on counselling process and outcome, further studies looking at clients' stage of change throughout the therapeutic process are needed. These studies would provide a more comprehensive look into whether stage movement occurs

during psychotherapy and the possible impact this has on the working alliance and therapeutic outcome.

Some initial empirical evidence was provided for stage movement when a cross-sectional study was conducted in the early developmental stages of the TTM. The purpose of the study was to investigate whether clients varied in readiness to change during therapy to provide empirical evidence for the stages (Prochaska & Costa, 1989). Not only did this study provide evidence for the creation of a stage based model, it offered some preliminary evidence that clients may vary in their readiness to change throughout psychotherapy as the effectiveness of certain interventions depended on the clients' stage of change.

Additional evidence supporting the hypothesis that clients move across the stages of change has been shown by comparing studies that collected data at two different time points. For example, there have been several studies that only measured clients' initial stage of change and found the vast majority of clients start psychotherapy in the contemplation stage (Lichner, 2002; Smith, Subich, & Kalodner, 1995; Stull, 1995). These results are then compared to studies that measured the stages of change at a different time point, such as one study that investigated clients who had been participating in psychotherapy for a month. It was found that a smaller percentage of contemplators were in this group, while a much larger percentage of the participants were in the action stage (Koraleski & Larson, 1997). These studies provide some preliminary empirical support for the use of longitudinal studies to investigate the relationship between clients' stage of change, working alliance, and therapeutic outcome.

Longitudinal Studies in Addiction and Health Populations

Several longitudinal studies have explored the stages of change, but the majority of these studies only investigated addiction or health behaviours. In one study, Prochaska, Norcross, et al. (1992) investigated 30 individuals participating in a weight control program. Participants were found to experience a decrease in contemplation scores over treatment, while their action scores significantly increased. More specifically, during treatment the stages of change went from accounting for 6% of the outcome variance when measured at pretreatment to 18% when measured at the middle of treatment. The authors concluded participants that were more involved in the action stage also attended more sessions and experienced better therapeutic outcomes.

Similar results have been found in longitudinal studies investigating individuals with tobacco addictions. For instance, a large sample of 570 smokers was monitored to see what percentage had abstained from smoking over an 18 month period. Participants who progressed from one stage to the next during their first month in treatment doubled their chances of taking action during the first six months of the program (Prochaska & DiClemente, 1992a). Prochaska, Velicer, Guadagnoli, Rossi, and DiClemente (1991) also examined movement across the stages of change in 544 adult smokers during a two-year period. Three stage progression patterns resulted: (a) flat (no change in stage at follow-up), (b) unstable (individuals had progressions and regressions in stages), and (c) linear change (either progression or regression through the stages). In a follow-up study investigating a larger sample of 2088 smokers, it was found that 44% of the participants followed a stable pattern (remaining at the same stage), 17% regressed (moved backward at least one stage), and 39% progressed (moved forward at least one

stage) (Norman, Velicer, Fava, & Prochaska, 1998). Stage movement was also indicated in a study investigating 300 adult smokers over five six month periods as 46% of participants showed a progression, 31% showed no change, and 23% regressed (DiClemente, 1999).

Even though these studies were investigating a very limited, narrow, and specific range of psychological concerns, they do provide strong empirical evidence that changes in stage membership occur throughout treatment. More importantly, they also suggest the most successful outcomes are from individuals who move into a higher stage of change.

Longitudinal Studies in Mental Health Populations

A very limited number of studies have investigated movement across the stages of change using a standard range of general psychological concerns. One study that found supportive evidence for stage movement investigated individuals attending a university health services clinic (Friedberg, 1996). It was found that participants maintained, progressed, or regressed stages throughout the therapeutic process. Additionally, an unpublished study found two thirds of clients with eating disorders who attended 14 cognitive behavioural group sessions moved to a higher stage of change by termination (Stull, 1995). Regardless of the type of psychotherapy offered, progression from the contemplation to action stage has been found to be critical for successful therapeutic outcome (Prochaska, DiClemente, & Norcross, 1992).

Another longitudinal study examining the stages of change in a psychotherapy population used a very small sample size. Prochaska, Rossi, et al. (1991) investigated whether three psychotherapy clients presenting with anxiety, depression, and social

isolation demonstrated movement through the stages during treatment. The first client terminated after five sessions showing no symptom change, while the second client continued for 10 sessions remaining in the contemplation stage with no decrease in symptoms. The third client attended 25 sessions and moved into the action stage of change experiencing a significant decrease in symptoms. Despite the sample size being very small, this study does provide some support for measuring the stages of change throughout the therapeutic process. It also highlights the importance of helping clients move into the higher stages of change to increase the chances of a successful outcome.

In the literature search only one study was found that measured the stages of change more than once in psychotherapy clients. Lichner (2002) investigated multiple variables before and after psychotherapy in 41 participants at two university counselling centers. Participants completed questionnaires regarding the stages of change, the change processes used, and psychological symptoms prior to psychotherapy. After termination they again completed the original measures, in addition to measures of the working alliance and perceptions of counselling.

The results provide partial support for the applicability of the TTM to a psychotherapy population. It was found that most clients entered psychotherapy in the contemplation stage and that one third of the participants moved to a higher stage of change. As predicted, clients that moved to a higher stage showed the most improvement. The author concluded that movement to a higher stage of change was more effective in producing a successful therapeutic outcome than were length of treatment, the client's level of disturbance, or the strength of the working alliance (Lichner, 2002).

There were several limitations to this study such as the small and homogeneous population that was used. A larger and more diverse sample is needed to generalize the results beyond university students to a wider community population. Another limitation is the use of the stages of change measure only at the beginning and end of psychotherapy. Research that measures the stages of change during psychotherapy will allow for a better understanding of clients who prematurely terminate from counselling, as well as if the relationship between these variables throughout the therapeutic process. Measuring the stages of change at multiple time points will allow for a more accurate picture of the relationship between the stages, working alliance, and therapeutic outcome.

Although this topic has not been widely studied, preliminary research has suggested it may be valuable to conduct additional longitudinal studies with psychotherapy populations. The results have provided some initial supporting evidence that clients move between the stages throughout psychotherapy. They have also shown that progression to a higher stage of change is related to successful outcomes. More importantly, these studies highlight the value of increasing clients' readiness by assisting them to move into a higher stage of change prior to beginning other therapeutic work. Moving clients to a higher stage of change may lead to the establishment of stronger working alliances and may also increase the chances of successful therapeutic outcomes.

Summary

Relatively few studies have investigated the applicability of the TTM to general psychotherapy populations as the vast majority of previous research examined its use

with specific behavioural problems such as substance addictions (Derisley & Reynolds, 2000). Although the populations used in a majority of the studies may have limited generalizability, these studies have provided support for the use of TTM in a treatment context. Research based evidence has indicated that pretreatment stages of change are related to treatment outcome, as well as the working alliance. Further studies are needed that explore the applicability of the TTM to individuals presenting with a broader range of concerns.

Past research exploring addiction and mental health populations have greatly contributed to our understanding of the stages of change. However, studies that investigated the TTM in psychotherapy populations found mixed results and had several significant limitations. Firstly, many of the studies that applied the model to psychotherapy used a homogenous population as they were conducted in university counselling centers. As such, it is not known if the results of these studies are generalizable to community psychotherapy populations. Previous studies have also provided empirical evidence that individuals move stages over the treatment period. Unfortunately, very few researchers investigating the stages of change have conducted longitudinal studies using psychotherapy populations. Instead, many of these studies tended to treat the stages of change as stable traits and therefore only explored their predictive value. There are difficulties in assessing the change process in this way, as it is a dynamic concept in which one's stage status can persist for a long period of time or can change very quickly. Therefore, investigating this active process with a single assessment is problematic (DiClemente et al., 2004).

Purpose of the Present Study

Due to these limitations and mixed research findings, additional research is needed to clarify whether the TTM is generalizable to a more diverse psychotherapy population. Additional investigations are also needed to assess whether the stages of change are related to both the working alliance and psychological distress throughout the therapeutic process. Therefore, the purpose of this study is to expand upon previous research by investigating whether clients progress through the stages of change during psychotherapy and if there is a relationship between the stages of change, working alliance, and psychological distress at different points in the therapeutic process. This will be done by measuring the variables after the first, fifth, and second last sessions in a population of adults attending a community counselling clinic. Additionally, this study will explore whether the working alliance mediates the relationship between the stages of change and symptom improvement.

Hypotheses

Based on the literature, this study has four main hypotheses:

1. Counselling clients will progress to a higher stage of change during psychotherapy.
    a. At the first session, clients in a higher stage of change will report higher working alliance scores, more psychological distress, and have more symptom improvement at termination than clients in a lower stage of change.
    b. At the fifth session, clients in a higher stage of change will also report higher working alliance scores, more psychological

distress, and have more symptom improvement at termination than clients in a lower stage of change.

c. At the termination session, clients in a higher stage of change will rate the working alliance higher, report less psychological distress, and have more symptom improvement than clients who terminate in a lower stage of change.

d. Clients who move from the contemplation to the action stage will rate the working alliance higher and have more symptom improvement than clients who remain in the contemplation stage during psychotherapy.

2. Working alliance scores will increase throughout psychotherapy.

3. The working alliance will mediate the relationship between the stages of change and amount of symptom improvement.

4. Psychological distress scores will decrease throughout psychotherapy.

CHAPTER III

Methodology

The purpose of this study was to investigate the stages of change, working alliance, psychological distress, and symptom improvement in psychotherapy with a community population. To accomplish this, all of the variables were measured at three different time points: the first, fifth, and second last sessions. This chapter provides a description of the research participants, including necessary criteria for participation in the study and demographic characteristics. It includes comparisons of participants to both nonparticipants and those that failed to complete the study to determine if any significant differences were present. The measures used to assess the stages of change, working alliance, psychological distress, and symptom improvement are then described, including the purpose of each measure, scoring procedures, types of items, and psychometric properties. The support for not applying exclusionary criteria to the participant sample when conducting a naturalistic study is also discussed. In addition, the procedures used in this study to collect and analyze the data are described.

Participants

Participants in the study were 93 individual adults, 18 years or older, seeking counselling services from the University of Alberta Education Clinic from September 2006 to May 2007. The Education Clinic provides psychological services to a diverse population of clients. Counselling services were provided by 24 master's level students, four doctoral level student counsellors, and two doctoral level interns. All student counsellors were supervised by experienced registered psychologists.

During this study 187 individuals presented to the clinic for counselling and of these 121 were individual adults. Out of the total number of potential participants, 93 volunteered to participate. Participants ranged in age from 18 to 74 years old, with a mean age of 35.0 years. As is typical of most community psychotherapy populations the majority of participants were female ($n = 66$), while only about one third were males ($n = 27$). Participants attended between 1 and 22 sessions with an average length of 9.30 sessions. The largest percentage of participants were self-referred (63.4%). In addition, most of the participants identified themselves as Caucasian (78.5%). Of those who reported their marital status, most reported being single (50.5%) or married / common law (31.9%). Many of the participants also reported high average household incomes and having obtained some level of university education. A large portion of participants also reported receiving past counselling services. Additional demographic information on the participants is provided in Table 1.

Analysis of variance (ANOVA) and chi square revealed a few significant differences on the demographic variables among clients that volunteered to participate in the study and those that did not participate. Chi square analyses indicated there was a significant association between the level of reported household income and whether or not a client participated in the study, $\chi^2(1, n = 113) = 9.28, p = .002$. There were 42 clients within the $30,000 and higher income bracket that participated in the study compared to only 20 within the $20,000 or less income bracket. There was also a significant association between whether participants had obtained past counselling services and their decision to participate in the study, $\chi^2(1, n = 118) = 5.47, p = .02$. Of the clients who obtained counselling services in the past 64 agreed to participate in this

study, while only 29 clients that had never received past counselling volunteered to participate. Overall, the study sample appears reasonably representative of the population obtaining counselling services from this clinic. Clients with higher household incomes and those with past experiences with counselling services were more likely to participate.

As is typical in this type of population, the response rates decreased over the course of the study as clients prematurely terminated from counselling. The study began with 93 participants, was reduced to 67 by the fifth session, and 62 completed the final package after the second last session. Therefore, the drop out rate was 28% from the intake session to the fifth session, and by the second last session 33% of the original participants did not complete the study.

Due to the decline in participants throughout the study, analyses were carried out prior to testing the hypotheses in order to determine if there was a significant difference on the demographic variables between those that completed the study and those clients that prematurely dropped out. There was no difference in age noted between those clients that completed the study and those that did not after an ANOVA was conducted. Chi-square analyses indicated no difference in gender, marital status, ethnicity, education, household income, referral source, previous counselling experience, or length of previous counselling experience. ANOVAs also indicated there were no significant differences between clients that completed the study and those that did not on initial measures of the stages of change, the working alliance, and psychological distress. However, ANOVAs indicated a significant difference in the number of counselling sessions clients received. Clients completing the final research

package received more sessions than those that did not, $F(1, 91) = 24.45$, $p < .001$. Clients that completed the study received between 4 and 22 sessions ($M = 10.85$, $SD = 4.36$), while clients that did not received between 1 and 16 sessions ($M = 6.42$, $SD = 4.74$).

Overall, the comparisons indicated there were differences in household income and past counselling experience between clients that volunteered to participate in study and those that did not partake. The results also suggest the sample that participated in the study until termination was representative of the original sample, except in the number of counselling sessions received.

Table 1

Demographic Variables for Study Participants (n=93)

Demographic variable	n	Percentage
Gender		
Female	66	71.0
Male	27	29.0
Referral		
Self	57	63.4
Physician	3	3.2
Agency	8	8.6
Other (friend, media, family)	22	24.7
Ethnicity		
Caucasian	70	78.5
Asian	4	4.3
East Indian	2	2.2
First Nations	3	3.2
Hispanic	2	2.2
Mixed ethnicity	4	4.3
Other	5	5.4
Educational level		
University	62	73.2
Trade/high school	22	25.7
8 years of schooling or less	1	1.1
Average household income		
Less than $10,000	7	8.6
$10,000 - $30,000	28	32.3
$30,000 - $50,000	23	25.8
$50,000 or more	29	33.3
Marital status		
Single	45	50.5
Married or common law	29	31.9
Divorced/separated	15	16.5
Widowed	1	1.1
Received counselling in past		
Yes	64	68.8
No	29	31.2
Length of past counselling		
One year or less	49	52.4
One to three years	13	13.6
Three to five years	17	18.7
Five years or more	14	15.3

Measures

Three different measures were used in this study. To measure the stages of change the participants were administered the University of Rhode Island Change Assessment scale (URICA; McConnaughy et al., 1983); the working alliance was measured with the Working Alliance Inventory, Short Form (WAI-S; Tracey & Kokotovic, 1989); and psychological distress and amount of symptom improvement were measured with the General Health Questionnaire (GHQ-28; Goldberg & Hillier, 1979). Participants were also asked to fill out a demographic form measuring gender, age, ethnicity, marital status, educational level, household income, previous counselling experience, and length of previous counselling experience. Shorter versions of each scale that retained the validity and reliability of the original measures were used in this study. This was done to reduce the amount of time and energy needed to complete the packages as they were administered after the completion of a 50 minute counselling session.

Stages of Change

In order to measure the stages of change, participants were administered the University of Rhode Island Change Assessment (URICA) scale. The URICA is a self-report measure developed by McConnaughy et al. (1983) consisting of four separate subscales that measure the stages of change in accordance with the TTM. It was created by generating items based on behavioural definitions of the stages of change constructs. Items were then analyzed using principal component analysis, resulting in a four factor, 32 item measure (McConnaughy et al.).

In this study the 24 item version was used, which was developed from the original URICA questionnaire. The 24 items are grouped into four separate subscales: Precontemplation, Contemplation, Action, and Maintenance. Preparation, one of the five stages, was excluded from the URICA during the development of the scale as factor analyses indicated that its items loaded onto both the Action and Contemplation scales (McConnaughy et al., 1983). Each scale consists of six items and responses are made on a 5-point Likert scale ranging from 1 *(strong disagreement)* to 5 *(strong agreement).* The items are composed so they are applicable for change of any problem that the client chooses to focus on (DiClemente & Hughes, 1990). Precontemplation is examined with items such as "As far as I am concerned, I don't have any problem that needs changing"; Contemplation, with items such as "I think I might be ready for some self-improvement"; Action, with items such as "I am doing something about the problems that have been bothering me"; and Maintenance, with items such as "It worries me that I might slip back on a problem I have already changed, so I am here to seek help" (McConnaughy et al., 1983).

The URICA is useful for measuring process and outcome variables and has been used in treatment and research to assess the clinical process (DiClemente & Hughes, 1990). It also has sound psychometric properties that are considered to support the validity of the TTM among general psychotherapy clients (McConnaughy et al., 1983; McConnaughy et al., 1989). For example, the internal consistency reliabilities for the subscales are .79 for Precontemplation, .84 for Contemplation and for Action, and .82 for Maintenance (McConnaughy et al., 1989). Additionally, the subscale intercorrelations are .52 for Precontemplation and Contemplation and .53 for

Contemplation and Action (McConnaughy et al., 1989). The shorter version of the URICA also has high internal validity and is constructed from the items on the original measure that had the highest loadings and smallest error variances (Carbonari et al., 1996).

Discrepancies in methods for measuring the stages. The stages of change were created to capture the diversity in readiness to change and in the change processes utilized by individuals in therapy (McConnaughy et al., 1983). In their most simple form the stages are categorical labels placed onto the differing levels of readiness to change. Interpreting the stages of change has been done by several different methods, which has lead to some concern and confusion surrounding the appropriate use of the URICA in treatment populations.

One method used to assess readiness to change involves clustering individuals based on patterns of scores across the four subscales to create subgroups based on the stages (Carney & Kivlahan, 1995; DiClemente & Hughes, 1990). Not only does clustering make data analysis very complex, but this method also requires large samples. Without large samples, the statistical power to predict becomes compromised as each subgroup only has a small number of participants (DiClemente et al., 2004).

Another method used to assess readiness on the URICA is to treat it as a continuous measure that assesses separate scales for each of the four stages (McConnaughy et al., 1989; McConnaughy et al., 1983). This is one of the most commonly used methods (e.g. Derisley & Reynolds, 2000; Koraleski & Larsen, 1997; Rochlen et al., 2005) and has been used in approximately 60% of previous studies on the stages and processes of change (Rosen, 2000). In this method participants are

assigned to one of the stages based on their highest subscale score. This method was used in this study. As the TTM is based on the idea that individuals are primarily in one stage with respect to a certain problem, categorizing clients into one stage based on their relative scores on the URICA subscales seems to best exemplify the conceptual intent of the change model (Rochlen et al.). To obtain the subscale scores, separate averages are calculated by summing the appropriate items and dividing the total by six, the total number of items in each subscale. The client is then assigned to the stage of change that has the highest average score. If identical averages in both the contemplation and action stages are obtained, the client is assigned to the preparation stage (Prochaska, DiClemente, & Norcross, 1992).

The Working Alliance

To assess the strength of the working alliance from the client's perspective, participants completed the Working Alliance Inventory, Short Form (WAI-S; Tracey & Kokotovic, 1989). The WAI-S is a 12-item self-report measure of the bond, and agreement on tasks and goals in psychotherapy and is based on the original 36 item WAI (Horvath & Greenberg, 1986). This shorter form was developed as part of a study conducted by Tracey and Kokotovic in which confirmatory factor analysis was used to discover which of three proposed models best fit the factor structure of the WAI. The authors concluded the second-order model was the best fit, which describes the WAI as measuring not only an overall alliance score, but also Bordin's three components of the alliance. From the results of their study the authors formed the WAI-S by combining the items from the original measure with the highest loadings on each of the three subscales (Tracey & Kokotovic).

Based on Bordin's (1979) model of the working alliance the three subscales of the WAI assess (a) the emotional bond of trust and rapport between the counsellor and client (Bond), (b) agreement about the overall goals of treatment (Goals), and (c) agreement about the tasks relevant for achieving these goals (Tasks). The Bond is examined with items such as "I believe that _____ likes me"; the Tasks through such items as "I believe the way we are working with my problem is correct"; and the Goals in such items as "_____ and I are working towards mutually agreed upon goals" (Tracey & Kokotovic, 1989). Due to the applicability of the three components to all types of therapy, the WAI has become one of the most commonly used measures of the working alliance (Horvath, 1994).

Ratings on the items are made on a 7-point Likert scale ranging from 1 *(never)* to 7 *(always)*. The global alliance score on the WAI-S is found by taking the sum of the 12 items and can range from 12 to 84, with a higher score equaling a stronger working alliance. The subscales on the WAI-S are composed of four items each with scores ranging from 4 to 28.

Good construct validity has been established and evidence of concurrent and predictive validity has been provided through significant correlations with other measures of the counselling relationship and therapeutic outcome (Horvath & Greenberg, 1989; Horvath & Symonds, 1991). Furthermore, Horvath and Greenberg found the WAI's overall reliability ranged from .85 to .93. Research has also provided strong support for the reliability and validity of the WAI subscales (Horvath, 1994). Internal reliabilities have been found to be .85 for the Bond subscale and .92 for the Tasks and Goals subscales (Horvath & Greenberg).

The interchangeability of the WAI and WAI-S has been investigated in numerous studies with positive results (Busseri & Tyler, 2003; Tyron & Kane, 1993). Busseri and Tyler found that the WAI and WAI-S have subscale and overall alliance scores that intercorrelate highly. They were also observed to have high internal consistencies, similar predictive relationships with outcome, and comparable factor structures (Busseri & Tyler). Some authors, such as Tyron and Kane, have suggested the WAI-S is preferable to the full-scale version because of the potential savings in time and ease of completion. These findings support the validity and reliability of the WAI-S and its use in the present study.

Psychological Distress and Symptom Improvement

To assess psychological distress participants completed the General Health Questionnaire (GHQ-28; Goldberg & Hillier, 1979). The GHQ looks at two main classes of problems: the inability to carry out one's normal health functioning and the appearance of new phenomena of a distressing nature. This measure is unique as it requires participants to only report those symptoms that have been present over the past few weeks. It also looks at features that differentiate psychiatric patients as a class from individuals in the community who consider themselves healthy and specifically looks for breaks in normal functioning (Mathers, Shipton, & Shapiro, 1993).

There are multiple versions of the GHQ; however the GHQ-28 is the most well known as it is the only version that is scaled. It was derived from a factor analysis of the original 60 item measure and was developed mainly for research purposes (Goldberg & Williams, 1988). It consists of 28 items that specifically assess short-term changes in emotional well-being and minor psychological distress (Goldberg & Hillier, 1979). The

GHQ has four subscales with seven items each including: Somatic Symptoms, Anxiety and Insomnia, Social Dysfunction, and Severe Depression. There is also a suicidality score that can be calculated by combining four items from the Severe Depression subscale.

The GHQ-28 asks the participant to rate particular symptoms or types of behaviour on a 4-point Likert scale, with items ranging from 0 *(not at all)* to 3 *(much more than usual)*. Somatic symptoms are examined with items such as "Have you recently been feeling perfectly well and in good health?"; Anxiety in items such as "Have you recently been getting scared or panicky for no good reason?"; Social Dysfunction with items such as "Have you recently felt you are playing a useful part in things?"; and Severe Depression in such items as "Have you recently been thinking of yourself as a worthless person?" (Goldberg & Hillier, 1979).

The total Global Health score can range from 0 to 84. This is obtained by finding the sum of all the items on the measure. Subscale scores are formed by finding the sum of the items for each scale with scores ranging from 0 to 21. On this measure high scores are related to high levels of psychological distress, while low scores indicate less psychological distress.

The GHQ-28 is one of the most thoroughly tested mental health questionnaires and has been found to have good reliability and validity (Mathers et al., 1993). Specifically, it has Cronbach alphas ranging from .84 to .93, a split-half reliability of .95, and a test-retest reliability of .90 (Goldberg & Williams, 1988). In addition, construct validity is well documented and exists across a variety of cultures (Conoley, Impara, & Murphy, 1995).

Demographics

A demographics form developed by the researcher was also included in this study (see Appendix C). The participants provided information about their age, gender, ethnicity, marital status, educational level, household income, whether they had obtained counselling services in the past, and the length of time they received past counselling services.

Procedure and Ethical Considerations

Prior to beginning the data collection process, all student counsellors were given a general introduction to the study. Specifically, this involved the procedure for inviting clients to participate in the study, ethical considerations, and the instructions for questionnaire administration. It also included a description of the purpose and nature of the study, obligations of the client and counsellor, issues of confidentiality, voluntary consent, and the right to opt out of the study without penalty. Also, the importance of maintaining confidentiality and anonymity of each of the participants was explained. Client anonymity and confidentiality were also maintained by marking the envelopes, consent forms, and questionnaires with unique identification numbers prior to administration.

As part of standard clinic procedure all individual adult clients were invited by their counsellors to voluntarily partake in the study during their first session. This involved each counsellor providing a brief introduction to the study including its purpose and nature. The risks and benefits, time commitment, and the ability to withdraw at any time were also explained. It was emphasized that identification numbers would be used to protect the participants' anonymity and confidentiality.

However, as it is standard clinical procedure, it was also explained that counsellors would receive a summary sheet of the total scores each client obtained on the intake questionnaires. These summary sheets assist the counsellor by highlighting possible areas of concern that therapy could address. However, past studies measuring clients' stage of change, the working alliance, and psychological distress did not provide counsellors with summary sheets of their clients' responses to the intake questionnaires. This is an important difference as counsellors in the present study were made aware of their clients' initial stage of change and psychological distress scores.

In addition, clients were informed that participation in the study was voluntary and the decision to partake would not impact future counselling sessions. Clients were then given time to read over the information and consent forms. If they agreed to participate, an information sheet for the study was provided (see Appendix A) and the consent form was signed by both the client and counsellor (see Appendix B). Participants were reminded that the counsellor would not see the original questionnaires and that only an initial summary sheet would be provided. This was done to try to prevent participants from providing socially desirable answers. The counsellor also advised participants that once the questionnaires were complete they were to place them in a sealed envelope and then to place the envelope in a locked box in the clinic. They then left the room so the participant could complete the package in privacy. Counsellors were instructed to return periodically to check on the participants and to respond to any questions.

Questionnaires were administered to the participants during three different counselling sessions. The URICA and GHQ-28 were filled out as part of a general

intake package that all individual adult clients are required to complete at the beginning of their first counselling session. Then at the end of this session, clients participating in the study completed another research package containing the WAI-S and demographics form. Additionally, after the fifth and second last sessions, participants completed packages consisting of the URICA, WAI-S, and GHQ-28. All of the questionnaire packages were estimated to take between 10 to 15 minutes each to complete. The completed consent forms and questionnaires were stored in locked filing cabinets in the research office. This ensured that each participant would remain anonymous and that the counsellor would not see any of the information.

Research Design: Limits to Internal and External Validity

The present study was conducted in a naturalistic setting, a psychology clinic that trains graduate students to be counsellors. The clinic offers services to individuals of all ages and provides individual, couple, and family therapy, as well as play therapy and psychoeducational assessments. Due to the restricted generalizability of previous psychotherapy research that utilized homogenous populations, the present study used no screening procedures or exclusionary criteria for participants. This was done as the purpose was to investigate the applicability of the TTM to a community psychotherapy population. It is believed that having no exclusionary criteria is one of the greatest strengths of this study as the diverse population used is more likely to be representative of the typical outpatient psychotherapy population seen by practicing clinicians (Westen & Morrison, 2001). In addition, using a heterogeneous population reduced the chances of discovering elevated outcome scores that may be found in a more homogeneous sample.

There are often threats to internal validity in studies conducted in naturalistic settings as a number of variables can not be experimentally controlled by the researcher. Nevertheless, maintaining internal validity comes with a cost to the external validity of the study. Westen and Morrison (2001) argue for the value of conducting naturalistic studies in psychotherapy research at the expense of internal validity. The authors have found the exclusionary criteria used to control internal validity in psychotherapy effectiveness studies to be highly variable and strict, leading to questions about the generalizability of the findings. This is important as clinicians are often not able to pick and choose their clientele. Therefore, research studies with strict exclusionary criteria may have little applicability to the general clinician's practice, as the majority of clients typically seen by these practitioners have been left out of the samples (Westen & Morrison).

For example, one exclusionary criterion often implemented in psychotherapy studies is the exclusion of individuals that have dual diagnoses according to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition Text Revision (DSM-IV-TR). This reduces the generalizability of the study as not only are multiple diagnoses often present within individuals in the general clinical population, but their presence can also impact the treatment response, course, and length (Westen & Morrison, 2001). Additionally, Westen and Morrison found when more of the potential participants are excluded from the study there was an increase in the effectiveness of the treatment. This seems to indicate therapeutic improvement becomes more noticeable when the population is homogeneous. However, general counselling populations are

rarely homogeneous and therefore the generalizability of studies with such strict exclusionary criteria is often severely restricted.

Statistical Analyses

All the data that was collected from the participants in this study was complied and analyzed with quantitative statistical analyses using SPSS 14.0. Comparisons were planned prior to the study and were created to answer the hypotheses. To balance the effects of Type I and Type II errors, all analyses in this study used $p < .05$ as the level of significance.

In order to investigate whether the stage of change and working alliance scores increased and psychological distress decreased throughout psychotherapy, separate repeated measures ANOVAs were used. To address the relationships between the stages of change, the working alliance, and psychological distress at sessions one, five, and termination, separate multivariate analyses of variances (MANOVAs) were conducted. In addition, MANOVAs were used to explore the differences in the working alliance and symptom improvement scores between those that progressed to the action stage by termination and those that remained in the contemplation stage. MANOVAs were used as they test the significance of group differences when several dependent variables are involved. Using MANOVAs is preferable to conducting multiple ANOVAs as the familywise error rate does not become inflated. The use of MANOVAs in this study is also supported as they should be used when there are "multiple dependent measures and they are intercorrelated, then the intercorrelations can be taken into account to provide a much richer multivariate analysis of the data" (Weinfurt, 1995, p. 252). Furthermore, MANOVAs allow relationships between the dependent variables to be investigated and

as such have the power to detect whether groups differ along a combination of dimensions (Field, 2005). Finally, the Baron and Kenny (1986) procedure for analysis of mediation effects was used to investigate the role of the working alliance in this study. This analysis requires that four criteria be satisfied:

1. The predictor variable (stages of change) must be significantly associated with the criterion variable (amount of symptom improvement).
2. Stages of change must be significantly associated with the potential mediating variable (working alliance).
3. A simultaneous multiple regression is then conducted in which symptom improvement is regressed on both stages of change and the working alliance. There are two factors that must be apparent in the resulting regression equation to support the evidence of a mediating relationship. The first is a significant relationship between the working alliance and symptom improvement is observed. The second is the strength of the relationship between the stages of change and symptom improvement decreases (partial mediation) or disappears (complete mediation) when the working alliance is also present in the regression equation.
4. The regression coefficient for stage of change when symptom improvement and the working alliance are added to the equation (Step 3) must be significantly smaller than the regression coefficient for the stages of change with symptom improvement alone (Step 1). This difference is tested with a *z* test and represents a significance test of the mediation relationship (Holmbeck, 2002).

If all the criteria are met in the analyses then there is empirical support for the working alliance as a mediating variable.

The following chapter will describe the results that were obtained from these analyses. In doing so, it will evaluate each of the hypotheses proposed in this study in light of the statistical analyses conducted.

CHAPTER IV

Results

Movement in the Stages of Change

To test the hypothesis that counselling clients would progress to a higher stage of change during psychotherapy, the stage of change scores at session one, five, and termination were compared using a repeated measures ANOVA. A significant main effect was found, $F(2, 112) = 22.81$, $p < .001$, indicating a significant difference in stage of change scores across the three time points. Contrasts were carried out to determine which means significantly differed. It was revealed that there was a significant difference between the means at session one ($M = 2.48$, $SD = .822$) and session five ($M = 3.02$, $SD = .964$), $F(1, 52) = 9.58$, $p = .003$, as well as between session five and termination ($M = 3.53$, $SD = .959$), $F(1, 52) = 14.10$, $p < .001$. This suggests that for the study completers an overall increase in the stage of change scores was experienced throughout psychotherapy. Overall, these results provide empirical support for the first hypothesis as clients progressed to a higher stage of change throughout psychotherapy.

In addition to providing empirical support for an overall increase in stage of change throughout psychotherapy, additional analyses found that participants also regressed stages or remained in the same stage throughout psychotherapy. While the majority of the sample progressed forward by at least one stage (56.5%), 37.1% remained in the same stage and 6.5% regressed at least one stage. Clients in the contemplation stage made up the majority of the sample at session one (71.0%), but by termination the largest percentage of clients were in the action stage (58.1%). There was also a substantial increase in the number of clients in the maintenance stage by

termination. The percentages of participants in each stage of change at all the time points are illustrated in Figure 1.

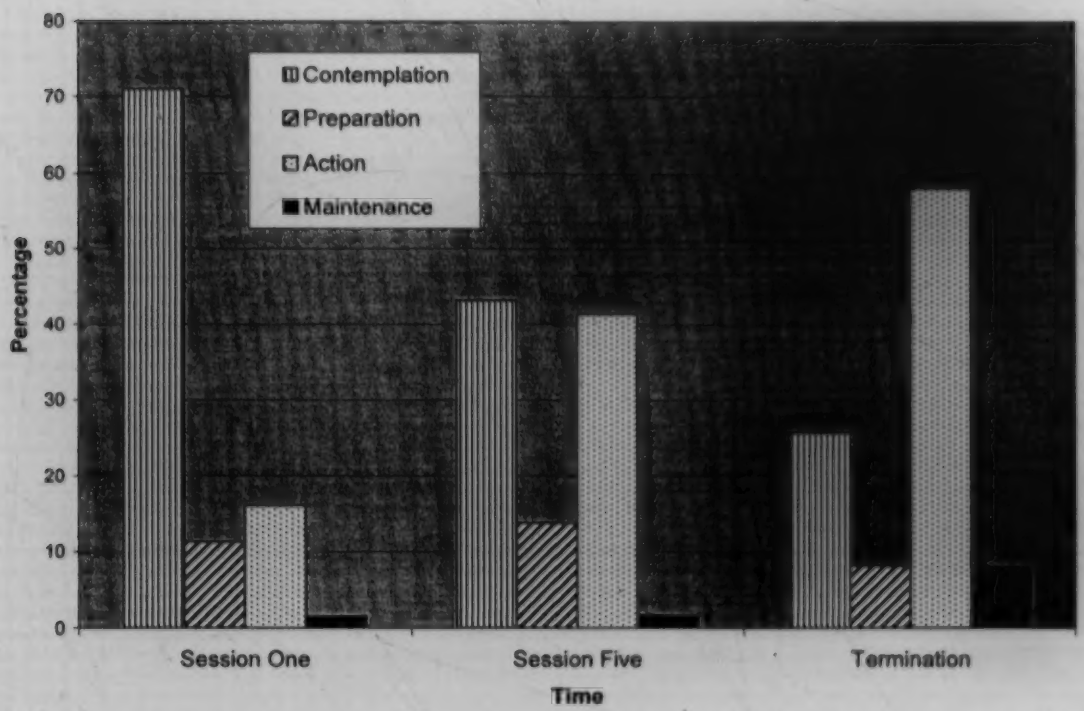

Figure 1. Percentage of participants in each stage of change at all time points.

Relationship between Stages of Change, Working Alliance, and Psychological Distress

The relationship between the stages of change, working alliance, and psychological distress was tested at each time point using separate one-way MANOVAs. It was predicted that at session one clients in a higher stage of change would rate the working alliance higher, report more psychological distress, and have more symptom improvement than clients in a lower stage of change. A MANOVA was carried out with the scores on the Working Alliance Inventory, General Health Questionnaire, and symptom improvement (difference on the GHQ pre- to post-counselling) as the dependent variables. To maximize cell values the few participants in the maintenance stage were dropped from the analyses, while those in the preparation stage were combined with the participants in the action stage. This is recommended as the preparation stage can also be conceptualized as the early stirrings of the action stage (Lichner, 2002; Prochaska, DiClemente, & Norcross, 1992). Therefore, the two groups used in the analyses were the clients in the contemplation and preparation/action stages. Pillai's trace (V) was used as the test statistic as it has been found to be the most robust (Field, 2005). The results of the MANOVA indicated there was no significant main effect at session one, $V = .01$, $F(1, 56) = .24$, $p = .87$, indicating that there were no differences between clients in the contemplation and action stages on the combined dependent variables.

As the prediction at session five was identical to the one made at session one, the same analysis were carried out with clients in the contemplation and preparation/action stages at session five. The results of the MANOVA indicated that there was also no significant main effect at session five, $V = .08$, $F(1, 52) = 1.39$, $p =$

.26, suggesting that there was no significant difference between the contemplation and action stages on the combined dependent variables.

It was also predicted that clients who ended psychotherapy in a higher stage of change would report stronger working alliances, less psychological distress, and more symptom improvement than clients who ended in a lower stage of change. The results of the one-way MANOVA indicated a significant main effect, $V = .26$, $F(1, 53) = 5.71$, $p = .002$, suggesting there was a significant difference between the two stage groups on the combined dependent variables. One-way ANOVAs were conducted on each of the dependent variables as part of the MANOVA analysis to determine which dependent variables were significantly different between the two stage groups. The results indicated that all of the dependent variables in the analysis were significant. The working alliance was significantly stronger for participants in the action stage ($M = 75.97$, $SD = 7.23$) when compared to those in the contemplation stage ($M = 66.93$, $SD = 9.36$), $F(1, 53) = 13.70$, $p = .001$. It appears that participants in the action stage also experienced less psychological distress at termination ($M = 14.56$, $SD = 9.66$) when compared to participants in the contemplation stage ($M = 24.19$, $SD = 14.84$), $F(1, 53) = 5.72$, $p = .006$. Finally, the results suggested that participants that ended psychotherapy in the action stage experienced more symptom improvement throughout psychotherapy ($M = -14.21$, $SD = 14.36$) than clients ending in the contemplation stage ($M = -2.31$, $SD = 10.12$), $F(1, 53) = 9.07$, $p = .004$. The difference in dependent variable scores at termination for clients in the contemplation and actions stages are illustrated in Figure 2.

Finding at least one significant ANOVA is quite common when there is a significant MANOVA and for this reason it is recommended that researchers follow up MANOVAs with a discriminant analysis (Field, 2005). This allows for the investigation of potential relationships between the dependent variables and helps to distinguish which variables or combinations of variables are of importance in distinguishing between groups. The overall discriminant function was significant, $\Lambda = .745$, $\chi^2(3) = 13.69$, $p = .003$.

After significance is found, the first step in this analysis is to investigate the standardized discriminant function coefficients. These coefficients indicate the semi-partial contribution or the unique controlled association of each variable to the discriminant function, controlling the independent but not the dependent variable for other independents entered in the equation (Field). The results indicated that the largest unique contribution to differentiating between those in the contemplation and action stages was made by the working alliance scores ($\beta = .769$), while the amount of symptom improvement ($\beta = -.376$) and psychological distress scores ($\beta = -.070$) made smaller contributions.

After the discriminant function coefficients are investigated, the next step is to analyze the structure coefficients, which are the simple correlations between the variables and the discriminant function (Field, 2005). The structure coefficients indicated that working alliance scores had the highest correlation with the discriminant function ($r = .926$), while amount of symptom improvement ($r = -.654$) and psychological distress scores ($r = -.590$) were not as strongly correlated. This suggests that the working alliance is slightly more important in differentiating the stage groups.

However, the amount of symptom improvement and psychological distress scores are both still important as the value of their correlations are quite large. Overall, the results suggest the working alliance had the most unique contribution in distinguishing between the two groups at termination.

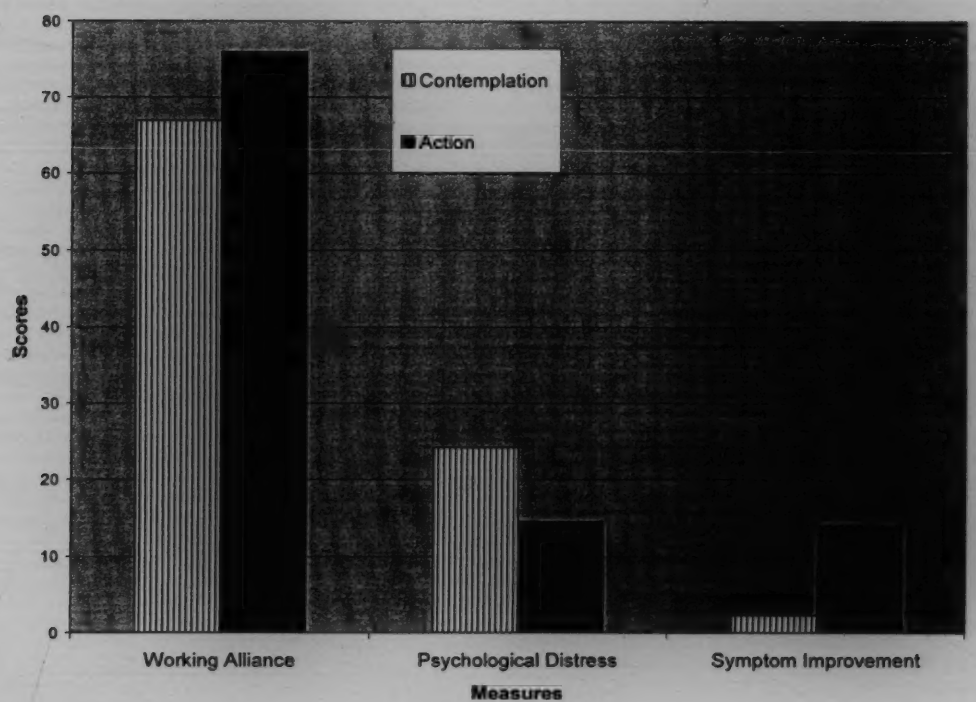

Figure 2. Difference in dependent variable scores at termination for clients in the contemplation and action stages.

Stage Movement, Working Alliance, and Symptom Improvement

The impact of stage movement on the working alliance and amount of symptom improvement was also investigated in this study. It was predicted that clients who moved from the contemplation stage to the action stage would have higher working alliance scores and more symptom improvement than clients who remained in the contemplation stage during psychotherapy. The hypothesis was tested with a MANOVA with both symptom improvement (difference on the GHQ pre- to post-counselling) and working alliance scores at termination as the dependent variables in the analysis. The two groups used were clients that by termination had moved from the contemplation to the action stage and clients who remained in the contemplation stage throughout psychotherapy. The results of the MANOVA indicated that the main effect was significant, $V = .30$, $F(1, 36) = 22.88$, $p < .001$, suggesting that the combined dependent variables were significantly different for clients who remained in the contemplation stage versus those clients who progressed to the action stage.

The one-way ANOVAs conducted on each of the dependent variables as part of the MANOVA analysis indicated that both the dependent variables were significant in differing clients in the contemplation and action stages. Working alliance scores were significantly higher for participants who had moved to the action stage ($M = 77.92$, $SD = 5.42$) when compared to clients who remained in the contemplation stage ($M = 65.31$, $SD = 9.38$), $F(1, 36) = 27.82$, $p < .001$. The results also suggested that participants who moved to the action stage had more symptom improvement ($M = -16.60$, $SD = 14.04$) than clients who remained in contemplation stage ($M = .15$, $SD = 7.26$), $F(1, 36) = 16.12$, $p < .001$.

To further explore the data, a more general analysis was also carried out investigating if progression of at least one stage during psychotherapy would also have a significant effect on the working alliance and amount of symptom improvement. Another MANOVA was conducted and the results indicated there was a significant main effect, $V = .16$, $F(1, 54) = 4.87$, $p = .01$, suggesting there was a significant difference on the combined dependent variables between clients that progressed at least one stage and those that did not progress. The results of the subsequent one-way ANOVAs on each of the dependent variables were also significant. Clients who progressed at least one stage during psychotherapy rated the working alliance higher ($M = 75.32$, $SD = 9.06$) than clients who did not progress a stage ($M = 68.14$, $SD = 9.50$), $F(1, 54) = 5.80$, $p = .006$. Additionally, clients who progressed a stage reported a greater reduction in psychological distress ($M = -13.06$, $SD = 16.13$) than clients who did not progress ($M = -3.86$, $SD = 9.59$), $F(1,54) = 8.09$, $p = .019$.

Working Alliance

To test the second hypothesis that working alliance scores would increase throughout psychotherapy, the mean working alliance scores at session one, five, and termination were compared using a repeated measures ANOVA. Mauchly's test indicated that the assumption of sphericity had been violated ($\chi^2(2) = 6.68$, $p = .04$); therefore the degrees of freedom were corrected using the Greenhouse-Geisser estimates of sphericity ($\varepsilon = .90$). A significant main effect was found, $F(1.79, 98.53) = 19.63$, $p < .001$, indicating a significant difference in working alliance scores across the three time points. Contrasts were carried out to determine which means significantly differed. It was revealed that the mean working alliance scores at session one ($M =$

67.45, $SD = 9.71$) and session five ($M = 71.21$, $SD = 9.81$), $F(1, 55) = 11.95$, $p = .001$, as well as between session five and termination ($M = 73.48$, $SD = 8.70$), $F(1, 55) = 8.04$, $p = .006$, were significantly different. Overall, the results indicated that working alliance scores significantly increased throughout psychotherapy, supporting the second hypothesis.

Working Alliance as a Mediating Variable

The third hypothesis in this study was that the working alliance would mediate the relationship between the stages of change and therapeutic outcome (amount of symptom improvement). In order to conduct the necessary analyses, two groups of participants were formed for the stages of change: clients in the preparation/action stage and clients in the contemplation stage.

This hypothesis was tested with the Baron and Kenny (1986) procedure for analysis of mediation effects. The first and second criteria in this procedure are that the stages of change must be significantly associated with the criterion variable (amount of symptom improvement) and as well as with the mediating variable (working alliance). Two linear regressions were conducted, one in which the stages were regressed on the amount of symptom improvement and one where they were regressed on the working alliance. There was a significant effect of the stages of change on both the amount of symptom improvement ($b = -10.71$, $t(59) = 2.60$, $p = .012$) and clients' rating of the working alliance ($b = 7.75$, $t(62) = 3.04$, $p = .003$).

The next step in this mediation procedure is to conduct a multiple regression analysis in which the amount of symptom improvement is regressed on both the stages of change and the working alliance. To meet the criteria at this step the results of the

regression analysis must indicate that while the working alliance is still significantly correlated with the amount of symptom improvement, the stages of change are no longer significantly correlated. The results suggested that the step three criteria were met. When both the stages of change and working alliance were added into the regression equation only the working alliance remained significant, $b = -.65$, $t(58) = -3.39$, $p = .001$.

The last step involved ensuring that the regression coefficient for the stages of change when used in the regression equation with the working alliance was significantly smaller than the regression coefficient for the stages. This involves testing the significance of the indirect effect, which is a test of whether a drop in total effect is significant with the mediating variable in the model (Holmbeck, 2002). Testing the significance of this difference involves using a z test (Holmbeck). In order to obtain the value of z, a Sobel test is carried out using the unstandarized coefficients and their standard errors from the regression analyses (Holmbeck). The Sobel test indicated a significant mediational pathway in this study ($z = 2.06$, $p < .05$) supporting the third hypothesis. The pathway is illustrated in Figure 3.

In addition, one can calculate the effect of the mediating variable on the direct relationship between the stages of change and amount of symptom improvement by dividing the unstandarized regression coefficient from the indirect effect by the unstandarized regression coefficient from the direct relationship ($b_{\text{indirect effect}} / b_{\text{total effect}} = 6.91 / 7.75$ or .8913) (MacKinnon & Dwyer, 1993). The results indicated that about 89% of the direct path was accounted for by the working alliance. This suggests that the working alliance is very close to fully mediating the relationship, as full mediation is

possible when the mediating variable accounts for 100% of the total effect (Holmbeck, 2002). As full mediation is very rare in social science research, finding that the mediating variable accounted for 89% of the direct path is a highly significant finding in psychotherapy research.

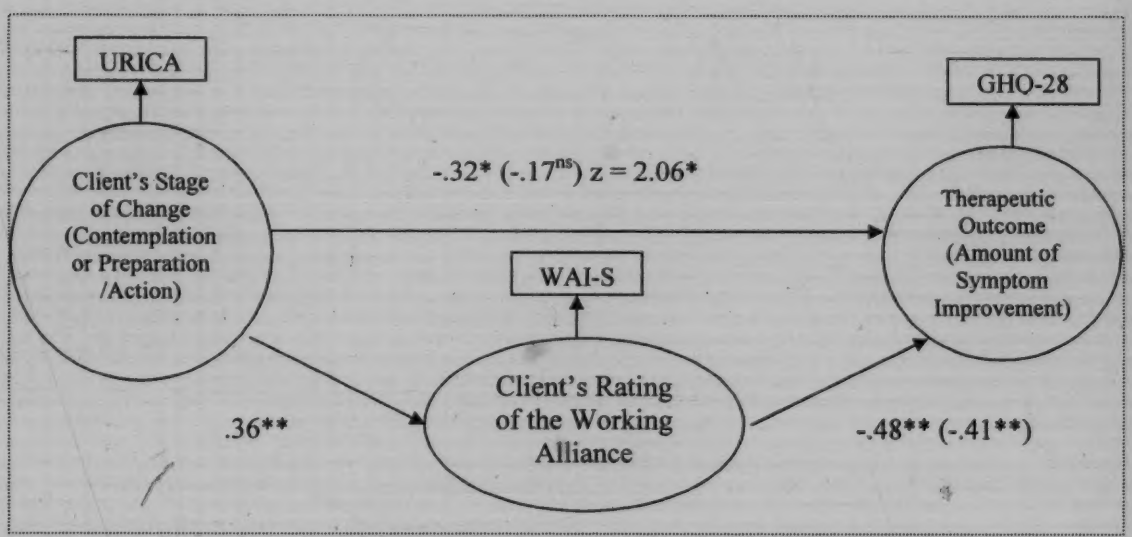

Figure 3. Mediational model for association between the stages of change and therapeutic outcome as mediated by client's rating of the working alliance. Values on paths are path coefficients (standardized ßs). Path coefficients on the outside of the parentheses are zero-order correlations (*r*s). Path coefficients in the parentheses are standardized partial regression coefficients from the regression equation that included the working alliance. $*p < .05$, $**p < .01$

Psychological Distress

A repeated measures ANOVA was used to test the fourth hypothesis that psychological distress scores would decrease throughout psychotherapy. A significant main effect was found, $F(2, 108) = 17.74$, $p < .001$, indicating a significant difference in psychological distress scores across the three time points. Contrasts were conducted to determine which means significantly differed. It was revealed that the means at session one ($M = 28.80$, $SD = 12.64$) and session five ($M = 22.04$, $SD = 12.85$), $F(1, 54) = 14.30$, $p < .001$, as well as at session five and termination ($M = 18.56$, $SD = 14.45$), $F(1, 54) = 5.26$, $p = .026$, were significantly different. As a lower score is associated with less symptomlogy, the results indicated that psychological distress decreased throughout psychotherapy supporting the fourth hypothesis in this study.

Summary

Stage movement occurred during this study with a large percentage of clients progressing at least one stage. Clients who progressed to a higher stage of change rated the working alliance higher and had more symptom improvement than clients who did not progress. More specifically, it was found that clients who moved from the contemplation to the action stage had a greater reduction in psychological distress and higher working alliance scores than clients who remained in the contemplation stage throughout psychotherapy. It was also found that there were no relationships between the stages of change, working alliance, and psychological distress scores at the first or fifth sessions. In contrast, clients in the action stage at termination reported better working alliances, less psychological distress, and more symptom improvement than clients in the contemplation stage. There was also a significant increase in working

alliance scores and a significant decrease in psychological distress throughout psychotherapy. Furthermore, the working alliance was found to be a mediating variable between the stages of change and amount of symptom improvement.

CHAPTER V

Discussion

Overview

In this chapter the major findings of this study will be discussed within the context of the recent literature on the stages of change, working alliance, and psychological distress. Also addressed will be the limitations of this study, the implications for counselling, and the directions for future research. Overall, the results of this study partially support the applicability of the transtheoretical model to a community based counselling population. Stage movement was found to occur during psychotherapy with participants who progressed to the action stage by termination, rating the working alliance higher and reporting greater reductions in psychological distress than clients who remained in the contemplation stage throughout psychotherapy. Results also highlighted the valuable role of the working alliance in the change process as it was found to differentiate clients in the contemplation and action stages at termination and to mediate the relationship between the stages of change and amount of symptom improvement.

Stage Movement Throughout the Therapeutic Process

The majority of previous studies investigating the stages of change measured the stages at pretreatment, operationalizing them as a stable trait that is not conducive to change over time (Derisley & Reynolds, 2000; Franko, 1997; Ginsburg, 2000; Rochlen et al., 2005; Smith et al., 1995; Willoughby & Edens, 1996; Wilson, Bell-Dolan, & Beitman, 1997). As such, past research has explored the stages' predictive value, but not their clinical utility for measuring readiness to change throughout the therapeutic

process (Petrocelli, 2002). The few studies that have investigated stage movement found that clients enter treatment in different stages of change (DiClemente & Hughes, 1990; Lichner, 2002; McConnaughy et al., 1989). The results of this study support the finding that clients enter psychotherapy in various stages of change. These findings are also consistent with previous studies that investigated voluntary treatment populations in which a large portion of the participants are in the contemplation stage when entering treatment (Lichner, 2002; Prochaska & Costa, 1989; Stull, 1995).

The hypothesis that clients would progress to a higher stage of change during psychotherapy was also supported in this study. Although 71% of clients entered psychotherapy in the contemplation stage, by termination 43% of clients had progressed to the action stage. In general, almost 60% of the participants in this study progressed at least one stage during psychotherapy. Having a large number of stage progressors was also shown in a study investigating individuals with eating disorders receiving cognitive behavioural therapy, where it was found that two thirds of participants moved to a higher stage of change by termination (Stull, 1995).

The stage of change clients were in at session five was also measured in this study. As this is an area that has not been investigated in previous research, it was hoped that additional information on the change process would be gained. It appears that by session five there is an almost equal division between those in the contemplation and action stages suggesting a point of transition in the change process. As the majority of clients in this study were already in the contemplation stage when entering treatment (71.0%), the rapid reduction in the number of contemplators from session one to session five (43.1%) suggests that clients attending voluntary counselling services may be more

ready to engage in therapeutic tasks and to work collaboratively with their counsellors than are clients in other clinical settings. This is supported by a study which found that clients in the precontemplation stage are more likely to present to counselling with a number of challenges for the counsellor, such as forming a working alliance, which can greatly impede the progress of psychotherapy (Rochlen et al., 2005). In addition, unlike past studies measuring clients' stage of change, the working alliance, and psychological distress, counsellors in the present study were made aware of their clients' initial stage of change and psychological distress scores. Therefore, another explanation for the large number of stage progressors is that counsellors were aware of their clients' initial readiness and distress levels and were therefore able to take these factors into account when forming an appropriate treatment plan.

Overall, the results are consistent with the transtheoretical model and previous studies that have addressed movement across the stages of change in psychotherapy (Lichner, 2002; Prochaska, Norcross, et al., 1992; Prochaska, Rossi, et al., 1991). Discovering stage movement is important to the therapeutic process, but more important is the investigation of how this movement impacts therapeutic outcome. This is imperative as the TTM is based on the conceptual framework that movement to a higher stage of change helps to facilitate a more successful therapeutic outcome (Prochaska, DiClemente, & Norcross, 1992).

The Impact of Stage Movement on the Working Alliance and Symptom Improvement

Movement in stages of change during the treatment process has been shown in both addiction and mental health populations (DiClemente, 1999; Friedberg, 1996; Norman et al., 1998; Prochaska & DiClemente, 1992a; Prochaska, Rossi, et al., 1991;

Stull, 1995). In general, it has been found that progression from a lower to a higher stage of change is critical for successful therapeutic outcome regardless of the type of psychotherapy (Prochaska, DiClemente, & Norcross, 1992). Moreover, it is believed that the most important stage progression is from contemplation to action (Brogan et al., 1999; Prochaska, Norcross, et al., 1994). The applicability of these previous findings were investigated in this study in a community based counselling population. Support was provided for a significant reduction in psychological distress for clients who moved from the contemplation to the action stage during therapy.

To further investigate stage movement throughout the therapeutic process, an exploratory analysis was conducted investigating two groups of participants; clients who progressed at least one stage and clients who remained in the same stage throughout psychotherapy. A similar comparison was made in a longitudinal study conducted by Lichner (2002), however the sample size was smaller and the generalizability of the study may be limited as it was conducted in two populations consisting only of university students. In a similar manner to the Lichner study, this study found that progression to a higher stage of change was related to symptom improvement. Although past studies have shown a relationship between the initial stages of change and symptom improvement (Franko, 1997; Rieger et al., 2000; Treasure et al., 1999), this is the first study with a large number of participants in a community counselling clinic to show that progression to a higher stage of change leads to symptom improvement.

As the results of this study suggest that movement to a higher stage of change, specifically from the contemplation to the action stage of change, leads to more positive

outcomes, support has been provided for the conceptual framework of the TTM in clients seeking counselling for a variety of presenting concerns. In addition, the counsellors used in this study were students in training who are encouraged to practice different techniques. Therefore, there were a variety of psychological orientations represented in this study providing further support for the finding that stage progression is related to outcome despite theoretical orientation (Prochaska, Norcross, & DiClemente, 1992).

Empirical support was also provided in this study for the premise that clients in a higher stage of change develop stronger working alliances and have better therapeutic outcomes than clients in the lower stages of change. More specifically, a significant difference was found in working alliance scores between clients who progressed from the contemplation to action stage and those who remained in the contemplation stage.

The literature review revealed only one study that has investigated stage progression and the working alliance found no relationship (Lichner, 2002). The author concluded that movement to a higher stage of change is an important variable in successful therapeutic outcome regardless of treatment length, disturbance level, or the working alliance. In contrast, this study found that the working alliance is a crucial factor in the success of the therapeutic outcome. Some differences between the current study and the Lichner study that may explain this finding are that in the Lichner study the working alliance was only measured at termination, not allowing for changes in the alliance over time. The instrument used to measure the working alliance was also different than the one used in this study. The WAI-S was used in this study because it measures the bond, tasks, and goals of the alliance and is applicable to all types of

therapy (Horvath, 1994). Additionally, the sample of study completers in the Lichner study was smaller and from a population consisting strictly of university students. Therefore, the present study may be more generalizable as the variables were measured at multiple points and a larger number of individuals completed the study.

Working Alliance Throughout Psychotherapy

The results of this study supported the hypothesis that working alliance scores would increase throughout psychotherapy. This finding is similar to past studies in that the working alliance from the clients' perspective demonstrated a progressive linear pattern (Kivlighan & Shaughnessy, 1995; Martin et al., 2000). However, when looking at the stage groups separately, this pattern was only indicated for clients in the action stage as the working alliance scores for clients in the contemplation stage stabilized after session five. In addition, past studies have also found fluctuations in the rating of the working alliance throughout psychotherapy (Gelso & Carter, 1994; Horvath & Greenberg, 1994). The results of this study did not suggest such a pattern, but the working alliance was only measured at three points suggesting that fluctuations between these points may have gone undetected. There may have also been a plateau point that went unobserved between the fifth and termination sessions that would have indicated a stabilization of the working alliance scores.

Although this study found an increase in working alliance scores throughout psychotherapy, past research has found that establishing a positive working alliance should be established within the first three sessions (Rainer & Campbell, 2001; Salta & Buick, 1989) and that once the working alliance is established clients' perspective of it remains stable (Horvath, 1995; Kivlighan & Shaughnessy, 1995; Martin et al., 2000).

The heterogeneous sample used in this study may be one reason an increase in working alliance scores occurred throughout psychotherapy. As Bordin (1994) has indicated clients with milder problems tend to develop strong alliances in one session, whereas clients with more severe presenting problems require more time to develop the alliance. As there were no exclusionary criteria for participation in this study, it is possible that the clients participating were dealing with multiple difficult issues and therefore built an alliance throughout psychotherapy.

The findings of this study indicate that developing a strong working alliance occurs throughout the therapeutic process for clients in the action stage. Conversely, clients in the contemplation stage follow the pattern found in previous research as their perception of the working alliance did not change after the fifth session. This stresses the importance of developing a strong alliance early in psychotherapy and the value of collaborating with clients in the lower stages of change to move them towards engagement with their problems.

Working Alliance as a Mediating Variable

Not only does the working alliance increase throughout psychotherapy, it was also found to mediate the relationship between the stages of change (contemplation and preparation/action) and amount of symptom improvement. This suggests that clients in the action stage of change were first able to develop stronger working alliances with their counsellors during psychotherapy than were clients in the contemplation stage. Developing a stronger working alliance in turn led to more symptom improvement for clients in the action stage when compared to those in the contemplation stage. This

suggests that clients' stage of change was expressed through the quality of the working alliance which emerged, and that this in turn was predictive of symptom improvement.

A mediational pathway was investigated in this study as past research has shown clients' initial stage of change is an important precursor in the ability to enter a therapeutic relationship (Henry & Strupp, 1994; Principe, 2005; Taft et al., 2004). For example, studies have found it is very challenging to form a working relationship with clients that are reluctant to begin working on their problems or are ambivalent about the change process (Bachelor & Horvath , 1999; Hatcher & Barends, 1996). Mediation was also investigated as previous studies have also found strong empirical evidence that the working alliance is positively related to therapeutic outcome (Barber et al., 2000; Horvath & Bedi, 2002; Horvath & Symonds, 1991; Kivlighan, 1990; Kivlighan & Shaughnessy, 1995; Kokotovic & Tracey, 1990; Lambert, 1994; Martin et al., 2000; Orlinsky et al., 2004; Rainer & Campbell, 2001). Additionally, recent research has found the working alliance to be a mediating variable between client expectancy and therapeutic outcome (Joyce et al., 2003).

Understanding the components of this mediational pathway is important to providing effective therapeutic services. Previous research has evaluated whether client characteristics influence ratings of the working alliance and has consistently found a moderate relationship between the alliance and pretherapy interpersonal measures (e.g. Gaston, 1991; Marmar et al., 1989). Other researchers have supported this claim suggesting that client characteristics provide the framework that allows an alliance to be fostered, provided the counsellor supplies the correct input (Henry & Strupp, 1994). One client characteristic that has been found to be a crucial component in the

development of the working alliance is clients' willingness and ability to become actively engaged in psychotherapy (Henry & Strupp). Therefore, one possible explanation for the working alliance being a mediating variable in this study is that clients in a lower stage of change are not committed to the change process and are still weighing the pros and cons of committing to work on their problems (Prochaska, 2000; Prochaska, Norcross, et al., 1994). In contrast, clients in the higher stages are more ready to begin the change process and are dedicated to the tasks that are required to reach their goals (Prochaska, Prochaska, Norcross, et al.). As they are more committed to change, these clients are more likely to be fully engaged in the therapeutic process and therefore develop stronger working alliances throughout psychotherapy. As has been shown in past research, having a strong working alliance is related to more successful therapeutic outcomes (Horvath & Bedi, 2002; Lambert & Ogles, 2004).

Although the working alliance was found to only partially mediate the relationship between the stages and outcome, it was found to account for 89% of this direct pathway. These findings add to the existing literature by providing additional empirical support for the crucial role of the working alliance in psychotherapy. As the working alliance has been highly regarded as at the minimum a vehicle for transmitting the active elements of psychotherapy (Hartley & Strupp, 1983) and maybe even a main active factor itself (Bordin, 1979; Gaston & Marmar, 1994), the finding of its important mediating role in this study further stresses its valuable therapeutic properties. The results suggest that developing a strong working alliance is crucial to promoting successful therapeutic outcomes and improved psychological health.

The Stages and the Importance of the Working Alliance

The working alliance has been called the most influential of the common factors in therapy and its value cannot be overstated (Horvath & Greenberg, 1994; Lambert & Ogles, 2004; Rainer & Campbell, 2001). The results of this study have added additional empirical support to its valuable therapeutic role. Although this study found no relationship between clients' stage of change at sessions one or five and their ratings of the working alliance, there was a significant association between stage of change and the working alliance at termination with clients in the action stage rating the working alliance higher than clients in the contemplation stage.

Past research has found mixed results in relation to pretherapy stage of change and the working alliance. In contrast to the findings of this study, previous studies have found clients' initial stage of change was positively related to the strength of the working alliance with clients in the higher stages of change developing stronger alliances than clients in the lower stages (Brogan et al., 1999; Bachelor & Horvath, 1999; Hatcher & Barends, 1996; Irannejad, 2003; Prochaska, Norcross, et al., 1994; Treasure et al., 1999). More specifically, Treasure et al. (1999) found the action stage to be significantly related to the working alliance, while Derisley and Reynolds (2000) found an association between the contemplation stage and the working alliance. Lukin (1997) also investigated these variables and found the pretherapy stages to only be minimally related to the working alliance.

Past studies have also found that working alliance scores stabilize between the third and fifth sessions (Horvath, 1995; Kivlighan & Shaughnessy, 1995). In this study, clients in the action stage experienced a steady increase in their working alliance scores

at each time point with a larger increase from session five to termination. Conversely, clients in the contemplation stage experienced an increase in their working alliance scores until session five after which their ratings stabilized. Therefore, a possible explanation for the nonsignificant findings at session one and five and the significant findings at termination may be based on the process of developing and maintaining the working alliance as the large percentage of contemplators made demonstration of a relationship more difficult.

Newer conceptualizations of the working alliance advocate a two phase development process that adds a new level to the formation of the alliance (Horvath & Luborsky, 1993). Similar to previous models, the first phase lasts until the fifth session and includes the formation of an early alliance. The goals of this phase are to promote continuance in psychotherapy, establish collaboration and trust, agree on what needs to be accomplished, and develop faith in the procedures that will be carried out during the sessions (Horvath, 1995). In this study for both the contemplators and clients in the action stage, an initial alliance was formed quickly and strongly as indicated by the high scores on the WAI-S by session five. This rapid development of a strong bond is most likely due to the nature of psychotherapy as clients are provided the opportunity to have someone fully attend to their concerns. As all clients are beginning to get acquainted with their counsellors in the first few sessions, it seems logical that their working alliance scores would not significantly differ.

The addition to this newer conceptualization of the working alliance is the second phase, in which the counsellor must deal with alliance ruptures and handle therapeutic conflict (Horvath, 1995). In this study, through the second phase of alliance

development, there was a change in ratings of the alliance between clients in the two stages with those in the action stage rating the alliance increasingly higher. This may suggest that beginning counsellors may lack the expertise that more experienced counsellors have in developing and maintaining a working alliance as they are more focused on practicing proper technique. Having an imbalance in the appropriate amount of exploration and development of insight could lead clients in the contemplation stage to remain stuck in this stage throughout therapy (Rainer & Campbell, 2001). Therefore, beginning counsellors may not be appropriately attending to the alliance or ruptures during this phase and may be applying too many action techniques that clients in the contemplation stage are not ready to begin using. Therefore, over time contemplators may remain ambivalent to the change process, resulting in weaker therapeutic bonds and less successful outcomes (Rainer & Campbell).

Another explanation for the significant difference in working alliance ratings not appearing until termination and for the stabilization of contemplators' working alliance scores after the fifth session, is that counsellors may not be attuned to the same aspects of the alliance as their clients (Samstaag, Batchelder, Muran, Safran, & Winston, 1998). Past studies have shown that the positive correlation between the working alliance and therapeutic outcome is the strongest when the client rates the alliance (Horvath & Symonds, 1991; Luborsky, 1994). An explanation that has been provided for this surprising finding is that counsellors tend to perceive the alliance from a theoretical perspective, while their clients use a more subjective lens, basing their perceptions on previous relationship experiences (Horvath, 2000).

A recent study by Rochlen et al. (2005) provided support for this premise as it was found that counsellors' ratings of the working alliance did not indicate a difference between those in the lower and higher stages of change; however the clients' ratings did. The authors concluded that the failure of the counsellor rated working alliance to show an effect may indicate that some counsellors are not able to detect clients that are more ambivalent to change or experiencing weaker therapeutic engagement (Rochlen et al.). This suggests that counsellors in the present study may have been unaware of the contemplators' ambivalence to change or incorrectly perceived it as resistance to the change process (Engle & Arkowitz, 2006).

Another important difference between clients in the contemplation and action stages that may impact the working alliance was discovered by Satterfield et al. (1995) when investigating client expectations for psychotherapy. The results of this study suggested that clients in the contemplation stage may expect counsellors to take on a larger role in directing the course of psychotherapy than do clients in the action stage. As working alliances are more collaborative relationships, clients in the contemplation stage may experience weaker working alliance scores after the fifth session if counsellors have not met their role expectations by being more directive during the sessions.

As the current study is one of the only studies that has measured the stages of change and working alliance at multiple points, it may provide one of the best indications of the dynamic relationship between these variables throughout the therapeutic process. The findings of this study suggest that regardless of the clients' stage of change at the beginning of psychotherapy, they develop similar working

alliances in the first five sessions of therapy. This highlights the value of establishing a strong alliance in the first few sessions. It was not until later in the therapeutic process that working alliance scores began to differentiate clients in the higher stages from those in the lower stages, leading those in the higher stages to a greater reduction in psychological distress by termination through their strong bond and collaboration on the tasks and goals with their counsellors.

The Stages and Symptom Improvement

Past research has found that clients that begin treatment in lower stages of change, despite reporting low levels of initial psychological distress, have less successful treatment outcomes than clients in higher stages (Franko, 1997; McConnaughy et al., 1984; Treasure et al., 1999; Wolk & Devlin, 2001). In contrast to these past findings, the results of this study suggested that clients in the action stage at session one or five did not have significantly more symptom improvement than clients in the contemplation stage. Conversely, by the termination session clients in the action stage did have more symptom improvement than clients in the contemplation stage.

This finding is similar to a past study conducted by Lumpe (2001) that investigated pretherapy stages of change and outcome in 1700 students attending a mental health clinic and found no relation between these variables. Another study investigating 400 participants' initial stage of change and corresponding outcomes only found a difference for clients initially in the precontemplation stage, as clients in the contemplation, action, and maintenance stages could not be distinguished based on outcomes (Rochlen et al., 2005). The authors concluded that clients in the precontemplation stage seem to present a number of challenges to the progress of

counselling and that perhaps the greatest challenge was their difficulty in forming a working alliance (Rochlen et al.). This may suggest that at the beginning of treatment clients in the contemplation, action, and maintenance stages are able to establish strong alliances regardless of their stage of change. The results of this study seem to support this premise. As clients in each of these three stages are able to develop strong alliances, this may explain why there was also no initial difference between the stages and the amount of symptom improvement. Therefore, this study has added to the previous research findings by showing that although there is initially no difference in therapeutic outcomes, over time those in the higher stages continue to build strong alliances with their counsellors leading to more symptom improvement. In contrast, clients in the lower stages maintain a stable perception of the working alliance after the fifth session, which appears to have less improvement in psychological distress levels at termination.

There is also an important difference between this study and previous studies investigating the stages of change and therapeutic outcome that may explain the nonsignificant findings in the initial sessions of this study. Some of these past studies used counsellors' ratings of the clients' progression and in doing so found a significant relationship between the stages of change and outcome (McConnaughy, 1985; McConnaughy et al., 1984). In this study, clients' ratings of their own psychological distress were used as a measure of symptom improvement. This may have been significantly different than ratings given by a counsellor as it has been found on other measures of outcome, such as the working alliance, that counsellors' scores appear to be independent of the ratings of their clients (Horvath, 1994). In addition, studies over the past three to four decades have shown that in a variety of scales and client populations,

differences in outcome have been found to be a function of source rather than content (Hill & Lambert, 2004). Hill and Lambert have commented on the trend in psychotherapy research to move away from therapist ratings of global psychological improvement to measures of client self-report. One reason for this move may be that client self-reports of specific symptoms provides a more conservative measure of outcome (Lambert & Hill, 1994). Another explanation for the difference may be that there are multiple ways to measure therapeutic outcome and that each facet contributes one piece to the overall therapeutic change that is experienced by the client (Hill & Lambert).

Psychological Distress Throughout Psychotherapy

As was hypothesized, psychological distress scores decreased during psychotherapy, becoming significantly lower at each of the measurement time points. It has been well established in previous research studies that psychotherapy is effective in treating a wide range of mental health problems with a moderate effect size in the .40 to .60 range (Lambert & Ogles, 2004). More specifically, a recent study investigating symptom improvement in two types of therapies found that despite 90% of participants reporting substantial distress at baseline, the course of improvement was fitted by a linear model with symptom distress declining throughout psychotherapy (Puschner, Kraft, Kachele, & Kordy, 2007). This study has provided further empirical evidence for the effectiveness of psychotherapy in reducing psychological distress with a community based counselling population. This evidence is even stronger when it is considered that the sample used in this study was selected without a screening procedure making this population more heterogeneous than many previously investigated populations. Westen

and Morrison (2001) have argued that many previous psychotherapy studies that found successful therapeutic outcomes used strict exclusionary criteria and therefore more homogenous populations than are typically seen by practicing clinicians. Thus, due to the lack of exclusionary criteria the findings of this study may be more generalizable to practitioners in the field as it is based on a general community psychotherapy population.

The use of a heterogeneous population in this study also helps to explain why even though there was a reduction in psychological distress during treatment, it never completely dissipated by termination. Another factor that may contribute to the reduction, but not the cessation of psychological distress scores is the nature of the clinic, as the time frame in which to provide counselling sessions is restricted. This suggests that a greater number of sessions may have changed the psychological symptom pattern, possibly allowing for a greater reduction in psychological distress by termination.

The Relationship between the Stages and Psychological Distress

Previous studies have indicated clients' initial stage of change is positively related to the level of self-reported psychological health (McConnaughy, 1985; O'Hare, 1996). Specifically, these studies found that clients in lower stages of change tended to report less psychological distress, while clients in higher stages reported moderate levels of distress. The explanation offered for this finding was that clients in lower stages of change are less cognizant of their problems, whereas those in the higher stages of change are much more aware of their presenting problems and distress levels (McConnaughy; O'Hare). Despite these past research findings, no significant difference

was found in this study between the stages and psychological distress at either session one or five.

One reason for this unexpected finding may be that the lowest stage represented by clients in this sample was the contemplation stage. Previous studies have found the initial distress level to be low for clients in the precontemplation stage and moderate for those in the contemplation and action stage (McConnaughy, 1985; O'Hare, 1996). These previous research findings suggest that differentiating clients in the contemplation and action stages based on their initial psychological distress levels may not be feasible. This may be because clients in these stages are aware of their presenting concerns and therefore more cognizant of their level of distress (Rainer & Campbell, 2001).

Despite there being no relationship between the stages of change and psychological distress at session one and five, there was a significant association observed between these variables at termination. This finding is in agreeance with past research which found that clients in the action stage reported better psychological health at termination (Franko, 1997; McConnaughy et al., 1984; Prochaska et al., 1993; Treasure et al., 1999; Wolk & Devlin, 2001). These findings suggest that although psychological distress levels begin fairly equal for both stage groups, over time the disparity increases. Therefore, assisting clients into the action stage where they are more likely to fully engage in the therapeutic process and complete the tasks necessary to reach their therapeutic goals can lead to better psychological health by termination.

Limitations

Although this study can further enhance our understanding of the stages of change and their relation to the working alliance and therapeutic outcome, it also has some limitations. One limitation in this study was the use of a population that had a large portion (63.4%) of clients that were self-referred. Having a large number of clients that were already thinking about changing may be one reason this study had no participants in the precontemplation stage. Therefore, this study may not be generalizable to populations of mandated clients that are more likely to be in the precontemplation stage at the beginning of treatment; instead, the results may be limited to voluntary psychotherapy populations.

In order to maintain ecological validity, the design of this study resulted in a few limitations. One of the main limitations is that student counsellors introduced the study and questionnaire packages to the participants. This limits the amount of situational control as different counsellors provided the research packages to each client and therefore the instructions may have been described slightly differently each time. In order to control some of these potential problems, each student counsellor was provided with a handout and script (see Appendix D) on how to introduce the study to their clients. It was pertinent in this study to have the student counsellor describe the research, obtain consent, and distribute the questionnaires as this maintained client anonymity and confidentiality.

Another limitation to this study was attrition as clients did not return for additional sessions. This stopped the student counsellors from being able to administer the fifth session or termination questionnaires. However, it was found that the drop out

rate did not compromise the internal validity of this study, as study completers were not significantly different from the participants that did not complete the study on any of the measured variables. Additionally, due to the number of participants decreasing at each time point, a larger sample size may have increased the power of the study and might have provided even more significant findings.

The use of self-report questionnaires is another limitation in this study as they can involve some element of rater bias and there is no way to decipher how much social desirability is influencing participants' responses. Clients that participated in this study were invited by their counsellor and asked to answer questions about their counselling experience. As such, they may have felt uncomfortable responding truthfully and instead answered in a socially desirable way. In order to control for social desirability bias, several attempts were made to reassure participants that their counsellors would not see the completed questionnaires and to inform them that all the questionnaires were marked with an identification number so the collected information remained anonymous.

It is thought that the theoretical and practical significance of evaluating the TTM in the context of a representative psychotherapy population counters these methodological concerns. In addition, the outcome measures used in this study, improvement in psychological health and the strength of the working alliance, are variables that are highly relevant to the provision of counselling services (Derisley & Reynolds, 2000). In using a psychotherapy population, it is thought that the research findings are likely to have greater clinical significance than studies using strict experimental controls (Seligman, 1995).

Implications for Counselling

The results of this study have contributed additional knowledge to the applicability of the TTM to a psychotherapy population and have important clinical implications. Several researchers have recommended the application of the TTM to psychotherapy to increase both the efficiency and efficacy of counselling services (Petrocelli, 2002; Corazzini, 1997). Overall, these results suggest that the TTM may be limited in its ability to differentiate outcomes and the strength of the working alliance based on the initial stages of change in psychotherapy with a community based counselling population. One way it may be useful to counsellors is it could help to identify clients in the contemplation stage that may require deeper exploration of their problems and less technique in the initial stages of therapy. If these clients are discovered early in psychotherapy then counsellors can work to increase their commitment to the change process that may assist them in moving to a higher stage of change.

Assessing clients' stages of change could be a central factor in forming a treatment plan, helping to increase both the therapeutic and cost effectiveness of counselling services (Derisley & Reynolds). Early identification of clients presenting in a lower stage of change would allow specific motivational interventions to be applied to these clients (Miller & Rollnick, 1991). Using motivational interventions could help to increase both the development of the working alliance and success of the therapeutic outcomes by moving clients towards engaging with their presenting problems and into a higher stage of change (Derisley & Reynolds, 2000).

The importance of assessing clients' stage of change throughout the therapeutic process has been highlighted in this study as it has been shown that stage movement occurs during psychotherapy. As each stage represents a different level of readiness to change, knowing the stage of change a client is in could be valuable information for the counsellor as it could inform them on which interventions would be more effective. Past studies have found that stage-matched interventions have a much greater impact than "action-oriented, one-size-fits-all programs by increasing participation and increasing the likelihood that individuals will take action" (Levesque, Prochaska, & Prochaska, 1999, p. 229).

This study also provided further empirical support for Corazzini's (1997) assertion that moving an individual from a lower stage of change to a higher stage may increase therapeutic effectiveness and the success of therapeutic outcomes. Increasing therapeutic effectiveness and outcomes are critical in times where insurance costs are rising and the number of sessions afforded to clients is decreasing (Arnett et al., 2004). Addressing clients' ambivalence towards counselling and change early in the therapeutic process may increase the chances of moving these clients into a higher stage of change. The results of this study have indicated the moving clients to a higher stage of stage by termination increases the strength of the working alliance and the amount of symptom improvement.

One extremely important finding of this study was that clients that remained in the contemplation stage reported weaker working alliances and less symptom improvement than clients in the action stage. This lack of change throughout psychotherapy seems to be related to the working alliance as it was found to stabilize

for clients in the contemplation stage after session five, while it continued to increase for clients in the action stage. These findings may suggest that clients' stage of change supplies the framework on which the alliance is built (Henry & Strupp, 1994). Therefore, having knowledge of the clients' stage of change may assist in the development and maintenance of the working alliance.

The results of this study emphasized the value of maintaining a strong working alliance by gaining a better understanding of how the client perceives the relationship and through dealing with ruptures as they appear. Ensuring that a strong alliance is maintained throughout therapy is important, especially for clients in the contemplation stage, as it lays the foundation for later therapeutic work (Safran, Muran, & Wallner, 1994). This involves discussing alliance ruptures in the here-and-now of the therapeutic relationship as this has been found to promote a stronger alliance and continuance in therapy (Kivlighan & Schmitz, 1992). It has also been recommended that counsellors remain aware of their clients' commitment to the therapeutic tasks and goals throughout therapy, making certain that there is agreement on both the long-term and short-term expectations of goal accomplishment (Horvath, Marx, & Kamann, 1990; Rainer & Campbell, 2001). Both this study and previous research have found there is a strong positive association between the working alliance and therapeutic outcome (Horvath & Bedi, 2002; Horvath & Symonds, 1991; Kivlighan & Shaughnessy, 1995; Lambert & Ogles, 2004; Martin et al., 2000). Therefore, making certain that all the components of the working alliance are maintained throughout therapy is likely to lead to better therapeutic outcomes at termination.

As the working alliance has been found to be a mediating variable in the relationship between stage of change and amount of symptom improvement, finding ways to work more effectively with clients in the different stages is critical to both the development of the working alliance and the corresponding therapeutic outcome. One suggestion in the literature is for counsellors to take on different therapeutic roles depending on the client's stage of change (Prochaska, 2000). For instance, to assist clients in the contemplation stage into the preparation or action stages the role that is suggested for the counsellor is the Socratic teacher and mentor who encourages the client to develop his/her own ideas and insights (Prochaska; Rainer & Campbell, 2001). In this role, the counsellor assists the client to identify options for change and the potential consequences of making those changes, while also encouraging initial activity towards change (Rainer & Campbell). Conversely, in the action stage the role of counsellor switches to the experienced coach, supporting and instructing the client towards change (Prochaska; Rainer & Campbell).

Lazarus (1989; 1993) takes the multiple counsellor roles one step further by suggesting that not only do clients vary by stages, but that the same client can vary from session to session or even within a session. Therefore, it is recommended that the counsellor should strive to be an "authentic chameleon" (Rainer & Campbell, 2001, p. 34), meaning that treatment is individualized to each client. Under this conceptualization, counsellors are encouraged to remain flexible in their relationship style and stances and to match them to the clients' needs and expectations (Lazarus, 1993).

Recent research has found that clients' stage of change is a crucial factor in the corresponding relationship choice of the counsellor (Norcross & Beutler, 1997). The results of this study indicated that clients in the contemplation stage have weaker working alliances and less symptom improvement. These findings provide support for the importance of matching counsellors' therapeutic and relational style to suit the clients' stage of change. Matching relational style and interventions to the clients' stage seems to be important as it may help to foster a stronger therapeutic bond.

Furthermore, this study can increase counsellors' understanding of the change process. Change is difficult and challenging process for all human beings and yet is a crucial component in all of our lives. Counsellors are often frustrated by clients' resistance to change and having a more thorough understanding of those more ambivalent to change may aid in reducing this struggle (Engle & Arkowitz, 2006). Prochaska and DiClemente (1992b) discuss the importance of counsellors having compassion for clients in the contemplation stage. They argue that counsellors must avoid blame, guilt, and premature change when working with these clients, but that they must also be careful not to advocate for chronic contemplation.

It is not uncommon for humans to continue to persist in self-defeating behaviours (Lichner, 2002). Self-verification theory is one way to understand those that remain stuck in the contemplation stage, as it suggests that individuals strive to make the world controllable and predictable and in this process attempt to preserve their self-concept no matter how negative (McNulty & Swann, 1991). In support of the role of this theory in the counselling process, research has shown that self-verification theory plays a major role in many clinical disorders, including depression and eating disorders

(Giesler, Josephs, & Swann, 1996; Joiner, 1999). This urge to maintain a stable self-concept may help to explain why several clients in this study did not change throughout psychotherapy and may assist counsellors to better understand those that appear more resistant to the change process.

Directions for Future Research

The results of this study suggest several areas for future research. Firstly, the scope of this study did not take into account the change processes that are used in sessions by individual clients. Prochaska and DiClemente (1985) have recommended that counsellors assess which change processes clients may be overemphasizing or underutilizing for their particular stage to help them move into a higher stage of change. Once a client's stage and processes of change are identified, counsellors can modify their interventions to match them accordingly (Prochaska & DiClemente). It may also be beneficial to identify the specific change processes that are most beneficial in the treatment of specific presenting concerns such as depression.

Future research may also focus on identifying the specific problem the client is attempting to change in psychotherapy and whether there is an inconsistency between the client's and counsellor's goals. Individuals who are experiencing general emotional distress are most likely dealing with several very complicated issues at once. As clients in the contemplation stage are just becoming aware of their presenting problems, it is possible they have a large number of issues they are currently thinking about changing. Therefore, there may be a higher chance than there is in behavioural change that the problem focus may change throughout treatment. As such, further research investigating which specific aspect of emotional distress the client and counsellor are attempting to

change at each time point could help to better understand the complexity of the change process in psychotherapy.

It may also be beneficial to gain an enhanced understating of the relationship between clients' stage of change and the working alliance as this is an area that has not been extensively studied. For example, future studies could look at determining if ruptures in the alliance are due to the counsellor misunderstanding the client's stage of change, as it is possible that the counsellor has implemented action-oriented interventions before the client was ready to begin the change process (Derisley & Reynolds, 2000).

Qualitative studies that investigate clients' perceptions and thoughts at the different stages of change may also assist in better understanding the change process. As movement into a higher stage of change has been indicated as an important factor in obtaining a successful therapeutic outcome (Prochaska, DiClemente, & Norcross, 1992), it may be especially important to investigate individuals that have moved from the contemplation to the action stage to gain a better understanding of what helped them to advance. Additionally, learning more about the counselling needs of clients in chronic contemplation may prove fruitful to understanding their perceptions of the therapeutic process.

Further research into the effectiveness of motivational interventions and their impact on the working alliance and therapeutic outcome is also needed. Several studies have shown that orientating clients to the counselling process early in psychotherapy can increase therapeutic effectiveness (Deane et al., 1992; Joyce et al., 2003). This could involve ensuring that clients have realistic expectations about the counselling

process. It could also involve increasing clients' motivational level or readiness to change before beginning additional therapeutic work if clients appear to be more ambivalent to the change process. Using a strategy such as motivational interviewing could improve the outcome for certain clients by progressing them towards being more involved in the therapeutic process and more fully engaged with their presenting concerns (Derisley & Reynolds, 2000).

Conclusion

Mental health problems have become an area of concern worldwide devastating not only the individuals involved, but also families, economies, healthcare systems, and communities (Health Canada, 2002a; WHO, 2007). Adding to this concern is the lack of recognition of the seriousness of mental health concerns and the limited understanding of the benefits of mental health services (WHO, 2003; 2007). It was proposed in this study that one way to address mental health concerns is to further investigate the change process in psychotherapy using the transtheoretical model. By identifying clients' stages of change, the transtheoretical model has provided researchers and practitioners with a quantitative method to investigate clients' readiness for the change process.

This study provides additional knowledge on the transtheoretical model by providing empirical support for its applicability to a community psychotherapy population. The results have also uncovered relationships between the stages of change, working alliance, and symptom improvement at various points throughout the therapeutic process. The findings of this study stress the importance of assisting clients to move into a higher stage of change during psychotherapy and may assist counsellors in understanding clients that are more ambivalent to the change process. The results also

provide additional empirical support for the importance of ensuring a strong working alliance is developed and maintained throughout psychotherapy.

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APPENDIX A

Information Sheet
Client change, working alliance, and therapeutic outcome project

Principal Researcher: Michelle E. Emmerling
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Supervisor: Dr. Barbara L. Paulson
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This research is being conducted by Michelle Emmerling in partial fulfillment of the requirements of the M.Ed. program in Counseling Psychology at The University of Alberta.

The objective of this study is to develop a better understanding of how ready clients are to begin looking at their concerns. If you participate you will be asked to complete several questionnaires. After the intake session you will be asked to complete one initial questionnaire which will take you around 5 – 10 minutes to complete. After the fifth session and at the end of counselling there will be three brief questionnaires, which will take 10 -15 minutes to complete, about your relationship with your counsellor, about your readiness to look at your concerns, and about your general health. These questionnaires **will not at any time** be seen by your counsellor.

This is a voluntary project; I can choose to not participate and I may withdraw at any time without penalty. The procedure and goals of this study have been explained to me by my counsellor and I understand them. It is not expected that the questionnaires will cause any discomfort or risk. However, I understand that I have the option to discuss any discomfort with my counsellor. Results of this study will be used to better understand the relationship between clients and counsellors and will assist counsellors in how to best meet their clients' needs. I understand that while the findings of this research will be published my identity will not be revealed to anyone. A summary of the main research findings can be obtained from the Education Clinic (1-135 Education North) after the study has been completed. I likewise understand that the plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension and Augustana Research Ethics Board (EEA REB) at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the EEA REB at (780) 492-3751.

APPENDIX B

Consent Form

Research Project: The Relationship of Stages of Change, the Working Alliance, and Outcome in Psychotherapy

Principal Researcher: Michelle E. Emmerling
Department of Educational Psychology
E-mail address: mee@ualberta.ca

Supervisor: Dr. Barbara L. Paulson
Professor and Director of Counselling Center
Department of Educational Psychology
University of Alberta
Edmonton, Alberta, Canada T6G 2G5
Phone: 492-5298 or 492-3746

The objective of this study is to develop a better understanding of how ready clients are to begin looking at their concerns. If you participate you will be asked to complete several questionnaires. After the intake session you will be asked to complete one initial questionnaire which will take you around 5 – 10 minutes to complete. After the fifth session and at the end of counselling there will be three brief questionnaires, which will take 10 – 15 minutes to complete, about your relationship with your counsellor, about your readiness to look at your concerns, and about your general health. These questionnaires **will not at any time** be seen by your counsellor.

I understand that this is a voluntary project and that I can choose to not participate. I also understand that I may withdraw at any time without penalty. The procedure and goals of this study have been explained to me by my counsellor and I understand them. It is not expected that the questionnaires will cause any discomfort or risk. However, I understand that I have the option to discuss any discomfort with my counsellor. Results of this study will be used to better understand the relationship between clients and counsellors and will assist counsellors in how to best meet their clients' needs. I understand that while the findings of this research will be published, my identity will not be revealed to anyone. I understand that a summary of the main research findings can be obtained from the Education Clinic (1-135 Education North) after the study has been completed. I likewise understand that the plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension and Augustana Research Ethics Board (EEA REB) at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the EEA REB at (780) 492-3751.

Having read and understood all of the above, I _____ agree to participate freely and voluntarily in this study.

Date: _____ Signature of Participant _____

Signature of Counsellor _____

APPENDIX C

Demographics Form

Please provide the following information about yourself by filling in the blank or circling the response.

Age: _____

Gender: Female Male

Ethnicity: Asian Black East Indian First Nations Hispanic Mixed Ethnicity White Other

Relationship status: Single Married/Common-in-law Divorced/Separated Widowed

Highest Level of Education of the adult(s) in the household:

a. Graduate/professional education
b. College/university degree
c. Partial college/university
d. Certificate in a trade/technology
e. High School diploma/GED
f. Partial high school training
g. Junior high school graduate
h. 8 years of schooling or less

Approximate Combined Income of your household:

a. Less than $10,000
b. $10,000 to $20,000
c. $20,000 to $30,000
d. $30,000 to $40,000
e. $40,000 to $50,000
f. $50,000 or more

Have you had counselling in the past? Yes No

If Yes, for how long? _____

APPENDIX D

Script for Presenting Research to the Client

After your client has finished filling out the intake package, please present the following before beginning your first counselling session.

"The Education Counselling Clinic is based on three fundamental mandates which make up the purpose of the center. These are: community service, teaching and training, and research. Research is a very important component of this clinic as it may help to better understand the counselling process."

"The current research being conducted in the clinic is looking at client's readiness to begin the change process, the relationship with their counsellor, and therapeutic outcome. It will involve filling out small packages 3 different times throughout our work together, after the first session today, after the 5th session, and lastly in our second last session together. Each package should take no more than 10 minutes to complete."

"This research is completely voluntary and your decision whether or not to participate will not impact our work together. I will not see the questionnaires you fill out as you will seal them in an envelope and place them into a locked drop box. In addition, your answers will remain anonymous as each sheet is marked with only a number."

"If you agree to participate in the study, you have the right to withdraw at any point. If you have any questions or concerns you can ask me or contact the researcher. Would you like to volunteer to participate in the study?"